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ABSTRACT

The four chapters of Volume II contain summaries of the research studies conducted during the development of the Georgia Educational Television Evaluation Model. They are: Instructional television questionnaires, evaluation of communiques and teacher aids--"Wonderful You," evaluation of communique and teacher aids--"Patterns," and summary of public broadcasting survey. Specifics with regard to sample characteristics, statistical analyses, instrument development and try-out, etc. are presented, as are copies of the instruments used. (For related documents, see TM 002 621-631, 633-635.) Author/KM)

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VOLUME II

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Research Studies Conducted As

Part of

THE DEVELOPMENT AND FIELD TEST OF AN EVALUATION MODEL FOR EDUCATIONAL TELEVISION

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PREFACE

The major purpose of the empirical studies reported in this Volume II was to provide detailed data to be used in developing an evaluation model for educational television. The model building was basically an inductive activity. Information from interviews, research reviews, and evaluative research efforts mounted by the project staff were used to generate the model presented in Chapter 4 of Volume I. The model in turn suggested devices that needed to be built and studies that should be made. The process might be likened to a series of iteration, each activity influencing the next. It is recommended that the reader begin with a brief consideration of the definitions of technical terms contained in Appendix A.

Chapter 1

Instructional Television Questionnaires

A major objective of the Georgia Educational Television Evaluation Project was to develop an evaluation model and software suitable for gathering data relative to the general and specific impact of educational television in the State of Georgia. This chapter summarizes the procedures used in developing and testing six questionnaires designed to gather information from various groups about their opinions and attitudes toward instructional television. Also included is a summary of the results of the pilot-testing of principal's, supervisor's or curriculum director's, students' and parent's forms of the questionnaire and the field-testing of the teacher form of the questionnaire.

In order to investigate the type of software needed for assessing the opinions and attitudes of various groups of individuals about instructional television, it was deemed necessary to investigate the status of educational television in the State of Georgia. Initially the staff of the Georgia Educational Television Evaluation Project compiled a list of 80 questions about the use, status, problems, etc. of educational television in the state. Various members of the staff of the Georgia Educational Television Network responded to these questions. A second series of interviews was conducted with those engaged in the field in the use of instructional television. This group consisted largely of teachers, principals and other selected educational and communications experts. Appropriate research literature was also consulted for ideas.

Teachers and principals were interviewed in 18 school systems in Northeast Georgia, Metropolitan Atlanta and Southeast Georgia. Wherever possible, teachers were observed using instructional television in their classrooms. In general the interview questions centered around the relationship of instructional television to the students and school administrators, supplementary materials available and their use, the utilization of television in school, scheduling problems and the use of communiques.

Based on these series of interviews and the review of the literature the project staff constructed six questionnaires designed for the major groups associated with the consumption of instructional television. Following is a brief summary of each questionnaire, the procedures used in either pilot- or field-testing of the instrument and the results of the test.

INSTRUCTIONAL TELEVISION QUESTIONNAIRE-TEACHER FORM

Teachers are the primary group of school personnel involved in the use of instructional television. Initially a questionnaire was constructed to gather information about the relationship of instructional television to students and to school administrators; supplementary materials for use with instructional television; utilization of instructional television, including scheduling problems; use of communiques and certain personal data about each respondent. The items in this questionnaire were parallel to those asked of principals and supervisors. The teacher questionnaire contained 44 yes-no items, and a list of 60 adjectives that each respondent was asked to mark either yes or no depending on his judgment as to whether or not the

the adjective was descriptive of instructional television. This list included such words as: good, foolish, difficult, expert, wise, etc. In addition the questionnaire contained eight items of personal information (years of teaching experience, level of certification, etc.) and five free response questions such as what programs would you like to see aired on instructional television.

The teacher questionnaire was administered to a group of 27 elementary classroom teachers in several schools in Northeast Georgia, by members of the staff of the Georgia Educational Television Evaluation Project. Data from this administration of the questionnaire was tabulated in terms of frequency and percent of response. The data from this initial pilot testing have been omitted from this report. Based on this initial testing and the analysis of the questionnaire by experienced classroom teachers and staff members of the Children's Television Workshop and the National Instructional Television Center, this initial instrument was revised.

The revised instrument is a 51 item multiple choice questionnaire, with ten items devoted to personal data about the teacher. The 41 items in the questionnaire center on the general topics of the relationship of instructional television to students, relationship of instructional television to school administrators, supplementary materials, utilization of instructional television and instruction and scheduling of instructional television. A copy of this instrument is found in Appendix B of this report.

A field test of this instrument was conducted with teachers in the Spring of 1970 in schools in the State of Georgia. Schools for field testing were chosen from the alphabetical listing of schools found in the Georgia Education Directory (GED) for the school year 1970. Twenty schools were

selected by drawing every 48th school in the list that did not have classes above the ninth grade. This restriction was imposed on the sampling scheme, since most instructional television is used in classes below the ninth grade. Of the ten congressional districts in Georgia, seven were represented at least once in this initial sample. To increase the reliability, over-all return, and to provide for data shortages due to non-respondents, 20 additional schools were chosen by listing congressional districts not covered in the first sampling, and then choosing schools from the GED that were located in these areas of the state.

Packets of materials were mailed to the principal in each school with a request that he distribute the questionnaires to the teachers in his school. (Copies of the "request for participation letters" are found in Appendix C) Return envelopes were provided for each principal. After the initial mailing six principals immediately responded that either their schools were not equipped for television reception or their teachers did not use television because of poor reception. Six additional schools were chosen from the GED to replace those that could not or did not receive a television signal.

It was anticipated that approximately 640 teachers would be available in the 40 schools that were contacted. Eventually 29 schools responded to the survey with a usable return of 397 teacher questionnaires. The results of this administration of the instrument are summarized in Table 1-1. This table presents the mean and standard deviation of the rating for items through 41 of the instrument. Items 42 through 51 refer to demographic data. The data from items 1 through 41 were submitted to factor analysis. However, no discrete factors were isolated. In general the teacher responses to the items

were below average, with most being around 2.50. It is interesting to note that the highest mean (3.57) rating for any item related to the perceived support that the principal gave to the use of instructional television in the school. Lowest rated items tended to deal with class related projects supposedly resulting from influence of ITV.

TABLE 1-1

Summary of Means and Standard Deviations for Forty-One Items of the Teacher ITV Questionnaire [1]

(N = 397)

Item	$\overline{X}$	SD
Relationship of Instructional Television to Students		
1. Relevance of subject matter covered in instructional television lessons to the needs of your students	2.75	1.40
2. The outside projects that your students have developed as a direct result of an instructional television program or series.	1.74	1.28
3. Outlook that your students have each week for the lessons they see on television.	2.61	1.51
Relationship of Instructional Television to School Administrators		
4. Support that your local school superintendent gives to the use of instructional television in your school system.	3.16	1.69
5. Support that your local curriculum director or coordinator gives to the use of instructional television in your school system.	2.61	1.82
6. Support that your principal gives to the use of instructional television in your school.	3.57	1.60
Supplementary Materials		
7. Quality of the supplementary materials available for use before and after instructional television programs.	2.33	1.39
8. Quantity of the supplementary materials available for use before and after instructional television programs.	2.10	1.36

[1] Rating Scale: Items 1-17: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, 5 = Excellent
Items 18-41: 1 = Never, 2 = Sometimes, 3 = Usually, 4 = Always.

TABLE 1-1 (Cont'd)

Summary or Means and Standard Deviations for Forty-One Items of the Teacher ITV Questionnaire (N = 397)

Item	$\bar{X}$	SD
Utilization of Instructional Television		
9. The advice and assistance that your curriculum director or supervisor is able to give on the utilization of instructional television.	1.74	1.55
10. The value of workshops or meetings conducted by the Georgia Educational Television Network Utilization staff. (Omit this question if you have not attended a meeting within the last twelve months.) (N = 51)	3.51	1.09
11. Training you had as an undergraduate in college on the use of instructional television. (If you had none, omit this question.) (N=83)	3.02	.89
Instruction and Scheduling of Instructional Television		
12. Format of instructional television programs.	2.56	1.64
13. Personality of the television teachers.	3.30	1.55
14. Length of the instructional television programs that you use with your classes.	2.75	1.52
15. Relationship of your scheduled classroom activities with instructional television programs.	2.42	1.40
16. Influence that your experience with instructional television has had on your pursuing additional academic work.	1.96	1.54
17. Overall worth of instructional television in the school curriculum.	3.00	.88

[1]Rating Scale: Items 1-17: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, 5 = Excellent.
Items 18-41: 1 = Never, 2 = Sometimes, 3 = Usually, 4 = Always.

TABLE 1-1 (Cont'd)

Summary of Means and Standard Deviations for Forty-One Items of the Teacher ITV Questionnaire[1]

(N = 397)

	Item	$\bar{X}$	SD
	Relationship of Instructional Television to Students		
18.	Do your students keep a television notebook?	1.27	.88
19.	Do your classroom tests include items directly related to what your students learned from instructional television?	1.63	1.09
20.	Do you prepare your students for an instructional television program?	2.47	1.26
21.	Degree to which you feel it is practical for you to prepare your students for a particular instructional television program?	2.60	1.50
22.	How often do you conduct a follow-up activities with your students, after they have viewed an instructional television program?	2.48	1.28
23.	Extent to which you feel that the content of instructional television programs, recommended for students, is at the appropriate level?	2.59	1.25
24.	Do you feel that the presentation of instructional television programs, recommended for your students, is at the appropriate grade levels?	2.61	1.24
25.	Do you think that your students enjoy watching instructional television?	2.77	1.35
	Relationship of Instructional Television to School Administrators		
26.	Does your principal cooperate with you and your fellow teachers in adjusting the overall schedule of the school in order to view instructional television?	1.87	1.11

[1] Rating Scale: Items 1-17: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, 5 = Excellent
Items 18-41: 1 = Never, 2 = Sometimes, 3 = Usually, 4 = Always.

TABLE 1-1 (Cont'd)

Summary of Means and Standard Deviations for Forty-One Items of the Teacher ITV Questionnaire[1]

(N = 397)

Item	$\overline{X}$	SD
Instruction and Scheduling of Instructional Television		
27. Extent to which you find it difficult to organize your classroom activities around the instructional television schedules?	1.87	1.11
28. Would you like to be able to repeat having your class view a particular instructional television program at a later time after its initial showing?	1.94	1.09
29. Does the present schedule for instructional television intefere with the organization of your instructional program?	1.64	1.05
30. Do you cooperate with your fellow teachers in adjusting class meetings in order to view instructional television programs?	2.58	1.59
31. Is the decision to use a particular instructional television series made by you?	2.66	1.49
32. Is the decision to use a particular instructional television series made by your department head?	1.07	1.06
33. Is the decision to use a particular instructional television series made by your principal?	1.27	1.05
34. Is the decision to use a particular instructional television series made by a group of you and your fellow teachers?	1.73	1.34
35. Extent to which you feel that the programs on instructional television are up-to-date in terms of the validity of their content?	2.77	1.32

[1]Rating Scale: Items 1-17: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, 5 = Excellent
Items 18-41: 1 = Never, 2 = Sometimes, 3 = Usually, 4 = Always

TABLE 1-1 (Cont'd)

Summary of Means and Standard Deviations for Forty-One Items of the Teacher ITV Questionnaire[1]
(N = 397)

Item	$\bar{X}$	SD
36. Extent to which you as a teacher, feel that you learn subject matter content as a result of watching instructional television?	2.48	1.26
37. Extent to which you feel that you learn teaching techniques from watching the television instructor?	2.17	1.15
38. Extent to which you tend to organize your classroom activities around an instructional television lesson or lessons?	1.98	1.07
39. Extent to which you feel that the use of instructional television tends to lend structure to your classroom lesson?	2.16	1.21
40. Extent to which you feel that the use of instructional television causes you to plan your lessons more closely?	1.96	1.19
41. Extent to which you think that the instructional television presentations are appropriate for the grade level for which they are designed?	2.55	1.28

[1]Rating Scale: Items 1-17: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, 5 = Excellent
Items 18-41: 1 = Never, 2 = Sometimes, 3 = Usually, 4 = Always

Questions 42 through 49 sought personal information about the teachers, while questions 50 and 51 established whether or not the teacher had a television set and if she used it in her classroom. The average teacher surveyed, teaches between grade levels two and five; is female; has been teaching more than ten years; holds a bachelor's degree; is certified and is between the ages of 46 and 55. Eighty-six percent of the teachers have access to television sets and 66% use them for Georgia In-School television series.

The results of this study were somewhat disappointing in that there was only a 62% return of the questionnaires and the factor analysis of the instrument did not reveal a discrete factor pattern. However, the instrument does lend itself to gathering useful information about the relationship of teachers to instructional television. This instrument coupled with the instruments described later in this report will help give an overall picture of the use of instructional television in the schools.

INSTRUCTIONAL TELEVISION QUESTIONNAIRE-PRINCIPAL FORM

Principals are involved in the everyday use of instructional television in their schools. The principal is responsible for the direct liaison of his school with the Georgia Educational Television Network, maintenance of television facilities in his school and the everyday operation of the total instructional program of his unit. For these reasons, it is imperative that the opinions and attitudes of this group of school workers be considered in any evaluation of the total impact of instructional television on the school. Initially a questionnaire was constructed to gather information about the relationship of instructional television to students and to school administrators; supplementary materials for use with instructional television; utilization of instructional television, including scheduling problems; use of communiques

and certain personal data about each respondent. The items in this questionnaire parallel those submitted to teachers and supervisors. The principal questionnaire contained 30 yes-no items and a list of 60 adjectives that each subject was asked to mark either yes or no depending on whether or not he agreed that the adjective was descriptive of instructional television. This list included such words as good, foolish, difficult, expert, wise, etc. In addition, all questionnaires contained eight items of personal information (years of experience, level of certification, etc.).

The principal questionnaire was administered to 37 principals (both elementary and secondary) who were in attendance at an inservice course on the campus of the University of Georgia during the Winter of 1970. Table 1-2 contains a summary of the frequency of response to the items and the percent of yes responses. In general the principals felt that there is a strong need for additional materials for use with instructional television and for additional training in the use of the medium in the classroom. Over 70% of the principals indicated that they recommended instructional television at all grade levels and that they were aware of the programs that their teachers were using. About 70% felt that the communiques were of value to their teachers. However, only 40% indicated that their teachers were using the communiques. Only 10% of the principals indicated that they required to use instructional television by the superintendent or school board and they likewise required their teachers to use the medium. Most items received a positive answer, averaging about 40%.

Based on this initial testing and the analysis of the questionnaire by two experienced elementary principals and staff members of the Children's Television Workshop and the National Instructional Television Center, this initial instrument was revised. The revised instrument is a 53 item multiple

TABLE 1-2

Percent of Principals (N=37) Responding YES
to Items 1-30 on Principal ITV Questionnaire

Frequency YES Response	% Yes		Question
4	10	1.	Does the Superintendent or School Board require the use of instructional television in your school?
4	10	2.	Does the Superintendent or School Board require the use of a particular instructional television series in your school?
12	32	3.	Have you brought your teachers together anytime in the past year to discuss the use of instructional television?
29	78	4.	Do you feel that there is a need for an increase in the number of visits made by the Georgia Educational Television Network Utilization staff?
9	24	5.	Have your teachers attended in the last year a system or school wide meeting to discuss the use of instructional television?
12	32	6.	Are you satisfied with the quantity and quality of the supplementary materials available for use before and after an instructional television program?
32	86	7.	Would you like to see more student work materials made available for use with instructional television?
11	29	8.	Have you had any difficulties in securing, from the Georgia Educational Television Network, a sufficient number of manuals for your teachers?
16	43	9.	Are you able to acquire sufficient supplementary materials for your teachers to use in connection with instructional television?
12	32	10.	Have you, within the last year, requested assistance from the Georgia Educational Television Network Utilization Staff?
8	21	11.	Has your PTA been concerned with instructional television?
4	10	12.	Has your PTA devoted one or more meetings in the last year to the subject of instructional television?

TABLE 1 - 2 (Cont'd)

Percent of Principals (N=37) Responding YES
to Items 1-30 on Principal ITV Questionnaire

Frequency YES Response	% Yes		Question
19	51	13.	Do you feel that the students in your school look forward each week to their television lessons?
28	75	14.	Do you feel that most of the programs presented on instructional television are up-to-date in terms of validity of content?
26	70	15.	Do you feel that the programs for each grade level are at an appropriate level of difficulty?
14	37	16.	Do you feel that your curricula has been changed as the result of the impact of instructional television?
29	78	17.	Do you feel that instructional television, as it is presently produced and programmed is a worthwhile educational tool?
26	70	18.	Do you recommend instructional television for all grade levels in your school?
8	21	19.	Do you feel that the format of the instructional television presentations interfere with normal classroom lessons?
4	10	20.	Do you require any of your teachers to use an instructional television series?
9	24	21.	Do you feel that your teachers tend to organize their classroom activities around the television lesson?
10	27	22.	Do you feel that you have a sufficient number of television sets for use in your school?
16	43	23.	Do you ever reschedule activities in your school, in order to accommodate the instructional television schedule?
21	56	24.	Do you feel that your teachers cooperate among themselves in adjusting their teaching schedules to accommodate instructional television viewing?
12	32	25.	Do you feel that the present scheduling of instructional television interferes with the organization of your schools instructional programs?

TABLE 1-2 (Cont'd)

Percent of Principals (N=37) Responding YES
to Items 1-30 on Principal ITV Questionnaire

Frequency YES Response	% Yes		Question
28	75	26.	Are you aware of which teachers are using instructional television?
8	21	27.	Have parents of your students ever discussed instructional television with you?
15	40	28.	Do your teachers watch the communique for the television series that they are using in their classrooms?
26	70	29.	Do you feel that the communiques are of substantial value to your teachers?
6	43	30.	Do you feel that the communiques are scheduled at a convenient time?

choice questionnaire, with eight items devoted to personal data about the respondent. The 45 items in the questionnaire center on the general topics of the relationship of instructional television to students and school administrators, supplementary materials, utilization of instructional television, instruction and scheduling of instructional television, communiques and parents and the PTA. This instrument closely parallels the final form of the teacher questionnaire. Therefore, it would be possible to compare general opinions and attitudes of teachers with those of their principals. A copy of this revised instrument is contained in Appendix D of this report. Because of the limitations of time, no efforts were made to field test this instrument. However, the authors felt that the instrument is a valid instrument that will yeild valuable information about the use of instructional television in the schools.

INSTRUCTIONAL TELEVISION QUESTIONNAIRE-SUPERVISOR FORM

Supervisors or curriculum directors are responsible in part for the everyday operations of the educational program at the county or system level. The supervisor is directly responsible to the Superintendent and Board of Education for the instructional system that is used in the system. For these reasons, the opinions and attitudes of supervisors toward instructional television must be given due consideration when evaluating the total instructional television program. In order to assess the opinions and attitudes of supervisors, a questionnaire was constructed that was designed to gather information about the relationship of instructional television to students and to school administrators; supplementary materials for use with instructional television; utilization of instructional television, including scheduling problems; use of communiques and certain personal data about each respondent. The items in

this questionnaire parallels those submitted to teachers and principals. The supervisors questionnaire contained 21 yes-no items and a list of 60 adjectives that each subject was asked to mark either yes or no depending on whether or not he agreed that the adjective was descriptive of instructional television. This list included such words as good, foolish, difficult, expert, etc. In addition, all questionnaires contained eight items of personal information (years of experience, level of certification, etc.)

The supervisors questionnaire was administered to a sample of 34 supervisors and curriculum directors who were in attendance at an in-service course on the campus of the University of Georgia during the Winter of 1970. Table 1-3 contains a summary of the response frequencies and percent YES relative to each item. In general the supervisors felt that there is a strong need for additional materials for use with instructional television, that their local school superintendent supported the use of instructional television, that instructional television is a very worthwhile educational tool and that the programs are up-to-date in terms of validity of content. About 67% of the supervisors recommended instructional television for all grade levels and felt that teachers cooperate among themselves in adjusting their teaching schedules to accommodate instructional television viewing. In contrast only about one-third of the supervisors indicated that their teachers watched the communiques and that the communiques were scheduled at an appropriate time. Responses to the adjective checklist ranged from 2% to 97%.

Based on this initial testing and the analysis of the questionnaire by two experienced curriculum directors and staff members of the Children's Television Workshop and the National Instructional Television Center, this initial instrument was revised. The revised instrument is a 48 item multiple choice questionnaire, with nine items devoted to demographic data about the supervisor and his school system. Thirty-nine items in the questionnaire center on the general

TABLE 1-3

Percent of Curriculum Directors and Supervisors (N=34) Responding YES to Items 1-21 on Curriculum Directors and Supervisors ITV Questionnaire

Frequency Yes Response	% Yes		Question
9	26	1.	Does the Superintendent or School Board require the use of instructional television in your school system?
28	82	2.	Do you feel that your local school administrators support the use of instructional television?
15	44	3.	Are you satisfied with the quantity and quality of the supplementary materials available for use before and after an instructional television program?
30	88	4.	Would you like to see more student work materials made available for use with instructional television?
10	29	5.	Are you able to acquire sufficient supplementary materials for your teachers to use in connection with instructional television?
10	29	6.	Have your teachers attended, in the last year, a system or school wide meeting to discuss the use of instructional television?
11	32	7.	Have you, within the last year, requested assistance from the Georgia Educational Television Network Utilization staff?
10	29	8.	Have you had any difficulties in securing, from the Georgia Educational Television Network, a sufficient number of manuals for your teachers?
28	82	9.	Do you feel that there is need for an increase in the number of visits made by the Georgia Educational Television Network Utilization staff?
22	64	10.	Do you recommend instructional television for all grade levels in your school system?
19	55	11.	Do you feel that the programs for each grade level are at an appropriate level of difficulty?
12	35	12.	Do you feel that your teachers tend to organize their classroom activities around the television lesson?
11	32	13.	Do you feel that the format of the instructional television presentations interfere with the normal classroom lesson?

TABLE 1-3 (Cont'd)

Percent of Curriculum Directors and Supervisors (N=34) Responding YES to Items 1-21 on Curriculum Directors and Supervisors ITV Questionnaire

Frequency Yes Response	% Yes		Question
16	47	14.	Do you feel that your curricula has been changed as the result of the impact of instructional television.
23	67	15.	Do you feel that your teachers cooperate among themselves in adjusting their teaching schedules to accommodate instructional television viewing?
15	44	16.	Do you feel that the present scheduling of instructional television interfer with the organization of your schools' instructional program?
30	88	17.	Do you feel that instructional television, as it is presently produced and programmed, is a worthwhile educational tool?
31	91	18.	Do you feel that most of the programs presented on instructional television are up-to-date in terms of validity of content?
12	35	19.	Do your teachers watch the communiques for the television programs that they are using in their classrooms?
14	41	20.	Do you feel that the communiques are of substantial value to your teachers?
12	35	21.	Do you feel that the communiques are scheduled at a convenient time?

topics of the relationship of instructional television to students and school administrators, supplementary materials, utilization of instructional television, the communiques and parents and the PTA. This instrument closely parallels the final form of the teacher and principal questionnaires. Therefore, it would be possible to compare general opinions and attitudes of teachers and principals with those of the supervisors in a particular school system. A copy of this instrument is found in Appendix E of this report. Because of the limitations of time, no effort was made to field test this instrument. However, the authors of this report feel that the instrument is a valid questionnaire that will yield valuable information about the use of instructional television in the schools.

Analysis of ITV Adjective Checklist

Date yielded by the ITV adjective checklist portion of the Teacher, Curriculum Director-Supervisor, and Principal questionnaires are difficult to interpret. A summary of these data is presented in Table 1-4. They are presented primarily to serve as a kind of abstract description and summary of the general "feelings" of the three groups toward ITV. The data reflect more similarities than differences. There is a slight tendency for teachers to agree with principals, and principals to agree with curriculum directors and supervisors, but not teachers with curriculum directors and supervisors. About the only single adjective to show dramatic differences was "entertaining", with teachers indicating proportionally, significantly fewer "yes" responses. There also was a tendency for curriculum directors and supervisors to make more negative responses.

INSTRUCTIONAL TELEVISION QUESTIONNAIRE-STUDENT FORM

A primary concern in the effective use of instructional television in school relates to the attitudes and opinions that the consumers (students)

TABLE 1-4

Summary of Three Education Groups Responses
to Instructional Television Adjective Checklist

Word	Group: Teacher (N=27) f	%Yes	Principal (N=37) f	%Yes	Curriculum Director or Supervisor (N=34) f	%Yes
Adequate	23	85	15	40	17	50
Powerful	5	18	15	40	14	41
Contemporary	20	74	29	78	29	85
Valuable	24	88	32	86	29	85
Shallow	4	14	8	21	2	5
Bland	6	22	13	35	6	17
Fair	18	66	24	78	24	70
Enriching	20	74	33	89	30	88
Dull	5	18	9	24	3	8
Stimulating	18	66	29	78	29	85
Boring	7	25	7	18	3	8
Acceptable	25	92	31	83	31	91
Good	23	85	32	86	30	88
Bad	5	18	4	10	1	2
Challenging	20	74	27	72	25	73
Informative	26	96	33	89	33	97
Fresh	20	74	26	70	22	64
Active	21	77	23	62	25	73
Relevant	21	77	31	83	30	88
Helpful	25	92	34	91	31	91

TABLE 1-4 (Cont'd)

Summary of Three Education Groups Responses
to Instructional Television Adjective Checklist

Word	Group: Teacher (N=27) f	%Yes	Principal (N=37) f	%Yes	Curriculum Director or Supervisor (N=34) f	%Yes
Creative	22	81	24	64	24	70
Interesting	24	88	27	72	31	91
Expert	17	62	24	64	23	67
Wise	16	59	28	75	24	70
Uninteresting	7	25	6	16	4	11
Kind	19	70	26	70	21	61
Inexpert	5	18	9	24	4	11
Meaningful	25	92	29	78	31	91
Foolish	3	11	6	16	1	2
Useful	24	88	32	86	32	94
Cruel	2	7	2	5	2	5
Strong	17	62	22	59	17	50
Meaningless	4	14	5	13	2	5
Hard	7	25	7	18	4	11
Useless	4	14	5	13	2	5
Deep	12	44	16	43	15	44
Weak	6	22	12	32	4	11
Large	15	55	16	43	9	26
Soft	6	22	14	37	5	14
Sharp	12	44	14	37	14	41
Entertaining	6	22	26	70	25	73

TABLE 1-4 (Cont'd)

Summary of Three Education Groups Responses
to Instructional Television Adjective Checklist

Word	Group: Teacher (N=27) f	%Yes	Principal (N=37) f	%Yes	Curriculum Director or Supervisor (N=34) f	%Yes
Active	21	77	27	72	23	67
Small	4	14	11	29	2	5
Complex	11	40	12	32	11	32
Fast	15	55	17	45	11	32
Passive	6	22	13	35	7	20
Exciting	19	70	19	51	23	67
Simple	12	44	14	37	12	35
Tense	3	11	6	16	8	23
Slow	6	22	9	24	6	17
New	15	55	24	64	22	64
Calming	14	51	23	62	14	41
Easy	9	33	18	48	14	41
Relaxing	16	59	20	54	18	52
Organized	25	92	31	83	32	94
Old	6	22	6	16	8	23
Reassuring	15	55	24	64	17	50
Difficult	9	33	8	21	11	32
Disorganized	3	11	6	16	6	17
Frightening	2	7	5	13	4	11

have with regard to the medium. In order to investigate the attitudes and opinions of students enrolled in the elementary grades toward instructional television two questionnaires were developed, one for the lower elementary grades (2nd and 3rd) and one for the upper elementary grades (4th through 7th or 8th). Following is a brief summary of the pilot testing of these two instruments.

Lower Elementary Grades Form

The lower elementary grades form is designed for administration to 2nd and 3rd grade students. This form of the questionnaire consists of 20 questions inquiring into how a child feels about various aspects of television in school. The questionnaire is administered as a group instrument with each child responding on an answer sheet by marking a picture of a smiling or frowning face (corresponding to his feelings toward the question asked about instructional television). Items on this questionnaire relate to the things that are done before and after the class watches television in school, the feelings each child has for the television teacher, the attitudes of their parents toward television in school and the use of television in the home. A copy of this instrument is contained in Appendix F of this report.

Permission was secured to administer the instrument to three classes of 2nd grade students (N=82) and three classes of 3rd grade students (N=83) in a school system in Metropolitan Atlanta, Georgia. The instrument was administered by a staff member of the Georgia Educational Television Evaluation Project during early April, 1970. Initially a tabulation of the frequency of responses was made for each grade and by sex. However, after examination of the results indicated no sex difference, data for the two sex groups were combined. Tables 1-5 and 1-6 present summaries of the results of the administration of the instrument to the 2nd and 3rd grade students, respectively. There is little difference in the results of the questionnaire between the two grade levels.

In general the children used in this pilot-testing of the questionnaire appear to like the television that they see at home better than the television that they see in school. Most of the children like to learn from the medium and feel that their fellow students also like the medium. The students as a whole have mixed feelings about the television teachers. A majority of the children like the television teachers. However, a substantial number of children marked the frowning faces. There is every indication that the children tire of seeing the same teacher every week on television. The children are generally pleased with the things that their teachers do related to instructional television. The children as a group are somewhat unhappy with the things (including pictures and drawings) that the television teacher uses in presenting her lessons. In summary, the group as a whole appears to be pleased with the use of instructional television in their classroom.

The instrument used in this study was submitted to examination by a group of experienced elementary teachers. No comments suggested changes of major dimensions be made in the format and style of the instrument. It appears that the instrument can be readily used with lower elementary grade children and will produce useable responses from the children who complete the questionnaire. The opinions and attitudes of children in the lower elementary grades must be considered when evaluating any type television project.

Upper Elementary Grades Form

The upper grades student questionnaire is designed for administration to children in the 4th through 7th or 8th grades. This form of the questionnaire consists of two parts. Part I is composed of 15 questions that are answered yes or no, while Part II contains 13 completion statements similar to those developed by Perrodin (1966) to determine children's attitudes toward science. Items on this questionnaire relate to the things that are done before and after

TABLE 1-5

Summary Statistics for Second Grade Students (N=82) Selecting Each of Four Attitude Rating Categories on Instructional Television Questionnaire (How I Feel About Television in School)

Question	Very Happy (4) %	Very Happy (4) f	Less Happy (3) %	Less Happy (3) f	Somewhat Unhappy (2) %	Somewhat Unhappy (2) f	Unhappy (1) %	Unhappy (1) f	$\bar{X}$
1. How do you feel about school?	71	(58)	22	(18)	0	(0)	7	(6)	3.4
2. How do you feel about watching television at home?	77	(63)	22	(18)	1	(1)	0	(0)	3.8
3. How do you feel about watching television in school?	62	(51)	23	(19	7	(6)	8	(6)	3.4
4. How do you feel about learning from television in school?	75	(61)	18	(15)	6	(5)	1	(1)	3.7
5. How do you feel about the television teacher?	57	(46)	30	(24)	6	(5)	7	(7)	3.3
6. How do you think the boys and girls in this class feel about television in school?	57	(56)	30	(25)	10	(8)	3	(3)	3.4
7. How do you feel about things the television teacher tells you to do?	68	(56)	22	(18)	2	(2)	8	(6)	3.5
8. How do you feel about the way your classroom teacher does the things that the television teacher suggests?	77	(63)	14	(12)	2	(2)	1	(14)	3.7
9. How do you feel about seeing the same teachers on television each week?	28	(23)	27	(22)	22	(18)	23	(19)	2.8
10. How do you think your classroom teacher feels about television in school?	88	(72)	11	(9)	0	(0)	1	(1)	3.9
11. How do you feel when the television set is turned off in your classroom?	15	(12)	6	(5)	23	(19)	56	(46)	1.8
12. How do you feel about how good your classroom television looks and sounds when it is on?	75	(61)	15	(12)	9	(8)	1	(1)	3.6

TABLE 1-5 (Cont'd)

Summary Statistics for Second Grade Students (N=82) Selecting Each of Four Attitude Rating Categories on Instructional Television Questionnaire (How I Feel About Television in School)

Question	Very Happy (4) %	f	Less Happy (3) %	f	Somewhat Unhappy (2) %	f	Unhappy (1) %	f	$\bar{X}$
13. How do you feel about the things that the television teacher uses?	61	(50)	26	(21)	11	(9)	2	(2)	3.5
14. How do you feel when you think about television?	73	(59)	26	(21)	0	(0)	1	(1)	3.7
15. How do you think your mother and father feel about television in school?	68	(56)	16	(13)	5	(4)	11	(9)	3.4
16. How do you feel about the pictures and drawings that the teacher on television uses in talking about the lesson?	65	(53)	25	(21)	2	(2)	8	(6)	3.5
17. How do you feel about the things (that I do) (that your classroom teacher does) before you watch the television in school?	58	(47)	33	(27)	3	(3)	6	(5)	3.4
18. How do you feel about the things (that I do) (that your classroom teacher does) after you watch the television in school?	48	(39)	34	(28)	6	(5)	12	(10)	2.7
19. How do you feel about the teachers in (your) (our) school?	87	(71)	9	(7)	0	(0)	4	(4)	3.8
20. How do you feel about the questions that you have been asked today?	82	(67)	15	(12)	1	(1)	2	(2)	3.8

TABLE 1-6

Summary Statistics for Third Grade Students (N=83) Selecting Each of Four Attitude Rating Categories on Instructional Television Questionnaire (How I Feel About Television in School)

Question	Very Happy (4) %	f	Less Happy (3) %	f	Somewhat Unhappy (2) %	f	Unhappy (1) %	f	$\bar{X}$
1. How do you feel about school?	50	(42)	17	(14)	11	(9)	22	(18)	3.0
2. How do you feel about watching television at home?	71	(60)	22	(18)	4	(3)	3	(2)	3.6
3. How do you feel about watching television in school?	62	(51)	29	(24)	7	(6)	2	(2)	3.1
4. How do you feel about learning from television in school?	70	(58)	23	(19)	6	(5)	1	(1)	3.6
5. How do you feel about the television teacher?	45	(37)	35	(29)	12	(10)	8	(7)	3.2
6. How do you think the boys and girls in this class feel about television in school?	58	(48)	23	(19)	6	(5)	13	(11)	3.3
7. How do you feel about things the television teacher tells you to do?	47	(39)	30	(25)	12	(10)	11	(9)	3.1
8. How do you feel about the way your classroom teacher does things that the television teacher suggests?	58	(49)	22	(18)	10	(8)	10	(8)	3.3
9. How do you feel about seeing the same teachers on television each week?	13	(11)	23	(19)	27	(22)	27	(31)	2.6
10. How do you think your classroom teacher feels about television in school?	75	(62)	20	(17)	4	(3)	1	(1)	3.7
11. How do you feel when the television set is turned off in your classroom?	22	(18)	6	(5)	13	(11)	59	(49)	1.9
12. How do you feel about how good your classroom television looks and sounds when it is on?	64	(53)	25	(21)	9	(7)	2	(2)	3.5

TABLE 1-6 (Cont'd)

Summary Statistics for Third Grade Students (N=83) Selecting Each of Four Attitude Rating Categories on Instructional Television Questionnaire (How I Feel About Television in School)

Question	Very Happy (4) %	f	Less Happy (3) %	f	Somewhat Unhappy (2) %	f	Unhappy (1) %	f	$\bar{X}$
13. How do you feel about the things that the television teacher uses?	52	(43)	29	(24)	13	(11)	6	(5)	3.3
14. How do you feel when you think about television?	68	(56)	22	(18)	4	(3)	6	(6)	3.5
15. How do you think your mother and father feel about television in school?	59	(49)	22	(19)	6	(5)	12	(10)	3.3
16. How do you feel about the pictures and drawings that the teacher on television uses in talking about the lesson?	58	(48)	24	(20)	10	(8)	8	(7)	3.3
17. How do you feel about the things (that I do) (that your classroom teacher does) before you watch the television in school?	41	(34)	25	(21)	16	(13)	18	(15)	2.9
18. How do you feel about the things (that I do) (that your classroom teacher does) after you watch the television in school?	37	(31)	25	(21)	17	(14)	21	(17)	2.8
19. How do you feel about the teachers in (your) (our) school?	62	(51)	25	(21)	6	(5)	7	(6)	3.4
20. How do you feel about the questions that you have been asked today?	69	(57)	13	(11)	7	(6)	11	(9)	3.4

the class watches television in school, the feelings each child has for the television teacher, the perception of attitudes of their parents toward television in school, etc. A copy of this instrument is contained in Appendix G of this report.

This instrument was administered, in a pilot-test, to 89 sixth grade students (46 males and 43 females) in March, 1970 in a school in Northeast Georgia. The instrument was administered by a staff member of the Georgia Educational Television Evaluation Project to the total group of students. Table 1-7 presents a summary of the responses to each of the 15 questions contained in Part I of the questionnaire. All students indicated that they watched television in school and that 90% like to watch the medium. Over 80% of the students indicated that their teachers talked about the television programs before and after viewing and that they thought they learned from watching television. About 65% of the students indicated that they thought television was helpful in their educational opportunities. Only 21% indicated that they watched the same programs when they were at home during school hours.

Table 1-8 presents a summary of the responses made by the students to completion sentences contained in Part II of the questionnaire. In general the students felt that television in school was good; their favorite program in school was Cover to Cover; that they discussed a program after viewing it; that they learned from watching television in school; that a good television program should be interesting, educational and fun; that a good television teacher should be like the teacher on Cover to Cover; and that they liked television better than written assignments.

It appears that the instrument described above can be readily used with children in the upper elementary grades to determine their opinions and attitudes about instructional television. Results are interpreted as indicating

TABLE 1-7

Summary of Responses of Sixth Grade Students (N=89) to Structured Portion of Instructional Television Questionnaire

Frequency Yes Response	% Yes		Question
80	90	1.	Do you like to watch television in school?
58	65	2.	Do you think that watching television in school helps you with your school work?
89	100	3.	Do you ever watch television in school?
19	21	4.	When you are at home during school hours, do you ever watch the same shows you see in school?
74	83	5.	Does your teacher ever talk about a television show before you see it?
19	21	6.	Do you ever do any of the things that the television teacher tells you to do?
53	60	7.	Do you like the television teachers?
79	89	8.	Does your teacher ever talk about a television show after you see it?
0	0	9.	Do you watch television in school everyday?
49	55	10.	Does your teacher ever assign a television program for you to view at home?
74	83	11.	Do you think that you learn from watching television in school?
1	1	12.	Do you keep a television notebook?
2	2	13.	Have any of the television teachers ever visited in your school?
26	29	14.	Have you done a project as a result of watching a television program in school?
60	67	15.	Do you think that television in your school has improved your educational opportunities?

TABLE 1-8

Sample Responses to Sentence Completion Items of Sixth Grade Instructional Television Questionnaire (Percent Making Each Response)*

Percent	Item and Illustration Responses
	1. TELEVISION IN SCHOOL IS:
18%	good, O.K., fun
54%	educational and interesting
16%	not exciting, boring, uninteresting
	2. MY FAVORITE TELEVISION PROGRAM THAT I SEE IN SCHOOL IS:
78%	Cover to Cover
20%	Place in the News
2%	other programs
	3. OUR TELEVISION SET IN SCHOOL IS:
28%	black and white
23%	unfavorable response: terrible, boring, crummy, etc.
18%	favorable response: good, very nice, etc.
	4. WHEN IT IS TIME FOR OUR TELEVISION LESSON:
45%	we sit down and listen, pay attention, preparation activities
21%	we watch it
7%	we get restless, dislike it
	5. WHEN OUR TELEVISION LESSON IS OVER:
43%	we discuss it
16%	do other assignments, read, etc.
9%	go to lunch
	6. TELEVISION LESSONS ARE:
	Responses were similar to question 1.
	7. WE WATCH TELEVISION IN SCHOOL BECAUSE:
40%	we might learn new things, do learn new things
26%	my teacher thinks it is helpful
10%	it is educational and interesting

*Note that percents do not sum to 100 as only most frequently occuring responses are summarized.

TABLE 1-8 (Cont'd)

Sample Responses to Sentence Completion Items of Sixth Grade Instructional Television Questionnaire (Percent Making Each Response) (N=89)

Percent	Item and Illustrative Responses
	8. A GOOD TELEVISION LESSON:
18%	is fun, good or other positive response
18%	Places in the News
17%	is interesting, not boring, exciting
	9. TELEVISION LESSONS SHOULD:
21%	be fun, good, interesting
12%	teach us new things
9%	not be boring
	10. A GOOD TELEVISION TEACHER IS:
28%	Mr. Robbins on Cover to Cover
10%	Mr. Jerry Silverstein on Place in the News
10%	nice, fun
	11. TELEVISION NOTEBOOKS:
	This item was not answered in a meaningful fashion. The classes, in this study did not keep television notebooks and thus the students had no knowledge about how to respond.
	12. I LIKE TO WATCH TELEVISION IN SCHOOL BETTER THAN:
28%	it is not like work or written assignments
19%	Social Studies
12%	Spelling
	13. WRITE THREE SENTENCES ABOUT YOU AND EDUCATIONAL TELEVISION:
	Many replies were replications of the items (1) encompassing mostly favorable adjectives such as interesting, good, o.k., fun, etc. However, 15% of the students responded with negative adjectives. Students like the two teachers they see on the air, feel that television is somewhat imposed on them, feel it is fun and not really work.

the opinions and attitudes of children in the upper elementary grades must be considered when evaluating instructional television.

INSTRUCTIONAL TELEVISION QUESTIONNAIRE-PARENT FORM

In order to complete an evaluation of the full spectrum of the population involved in instructional television, a parent questionnaire was developed which contained eight yes-no questions. These questions centered on the knowledge and attitudes that parents had regarding the use of instructional television in school. This instrument was pilot-tested with a limited group of parents (N = 27) in attendance at a PTA meeting at a school in Northeast Georgia. The sample is not representative of any large definable population. The group did serve, however, the purpose of testing the ease of administration of the instrument.

Table 1-9 presents a summary of the responses of the parents and the percent answering each question "yes". Approximately 42% of the parents said that they had watched instructional television (programs presented between the hours of 8:30 a.m. and 3:00 p.m. over one of the television stations operated by the Georgia State Department of Education). About one-half of the parents indicated that their children discussed things that they saw on television in school and that they felt instructional television helped their children with homework. About two-thirds of the parents indicated that their children watched instructional television between the hours of 8:30 a.m. and 3:00 p.m. when they are at home during the school year and that they had read one or more articles related to instructional television in the last year. About half of the parents indicated that their children were required to watch a television program as a homework assignment on special occasions.

TABLE 1-9

Summary of Responses to Parent Form of
Instructional Television Questionnaire*

Frequency YES Response	% Yes	Question
10	42	1. Do you ever watch what is presented on one of the television stations operated or leased by the Georgia State Department of Education between the hours of 8:30 a.m. and 3:00 p.m.?
13	54	2. Does your child(ren) ever spontaneously discuss a program or programs he has seen in school?
12	50	3. Do you feel that instructional television helps your child with his homework?
1	4	4. Have you attended any school related meetings in the last year at which instructional television was discussed?
3	13	5. Have you attended any school related meetings in the last year at which an individual from the Georgia State Department of Education spoke on instructional television in the schools?
15	63	6. Have you read any articles in the last year, in either newspapers or magazines, devoted to instructional television?
15	63	7. Do your children ever watch instructional television between the hours of 8:30 a.m. and 3:00 p.m. when they are at home during the school year?
12	50	8. Are your children ever required to watch a television program as a homework assignment?

* Based on 27 parents at local PTA meeting

It would appear from this very limited sample of parents that they are to some extent knowledgeable of the part that instructional television plays in the educational process of their children. It would also appear that aprents are interested in learning more about the use of this medium in the school.

Appendix H of this report contains a copy of the final form of the parents' questionnaire. There have been no revisions made in the questionnaire.

SUMMARY

This chapter has presented the results of the development and testing of a series of six questionnaires designed to measure the opinions and attitudes of six different groups of individuals toward the use of instructional television. In general these groups of individuals like instructional television and think that it is of value in the educational process of elementary grade children. Problem areas in instructional television have been pointed out and suggestions offered for further study. The instruments used in this study have value in the overall evaluation scheme for instructional television and should be used to gather opinions and attitudes. The questionnaires appear to be a valid and reliable means of gathering information on the feelings of individuals toward the medium.

Chapter 2

EVALUATION OF COMMUNIQUES AND TEACHER AIDS - WONDERFUL YOU

The Georgia Educational Television Network (GETV) has produced a series of communiques or teacher-telelessons. The half hour communiques are designed to assist the classroom teacher in effectively utilizing television. The programs 1) suggest methods for preparing students for the telecourses, 2) provide brief overviews of the objectives and content of the telecourses and 3) suggest classroom follow-up activities. In addition, GETV has published a series of teacher aids or program manuals to accompany the telecourses. The publications are designed to provide the classroom teacher with information about the content of each telelesson as well as the total series. These teacher aids provide for the incorporation of audiovisual aids, community resources and field trips. Central to each lesson description is the specification of objectives for that lesson and supplementary instructional materials.

The ultimate criterion of educational television effectiveness must rest on the quantity of student learning. Previous learning research with television has been primarily of the end of unit or course type, summative in nature. Although there exists extensive evidence that children do learn from television, the employment of formative evaluation models with educational television has yet to be demonstrated. By gathering and feeding back to the production staff information on specific aspects of both individual programs as well as sequences within a series, a higher quality instructional experience should result. Formative evaluation could meet such a need.

In order to investigate the effectiveness of communiques, teacher aids and student learning, the television series Wonderful You was selected by the project staff in consultation with GTV for detailed analyses. Wonderful You

is a series of 33 telelessons designed for second grade children. The major objective of the Wonderful You social studies series is to guide the child toward a better understanding of characteristics of man and how he can improve his life. The series focuses on five forces which shape man's humanity. These five forces include: tools, education, language, man's urge to explain and to interpret his world, and social organization.

This study focused on two telelessons from Wonderful You with their corresponding communique and teacher aids. Lessons: Lesson 32, Planning More Human Communities and Lesson 33, Let's Build for Tomorrow Today, center on the development of human communities with particular focus on the new city of Brazilia.

OBJECTIVES OF STUDY

The ten primary objectives of this study are as follows:

1. To develop a reliable, valid, and efficient rating scale for evaluating teacher communiques.
2. To develop a reliable, valid, and efficient rating scale for evaluating teacher manuals.
3. To pilot test the use of the communique and manual rating scales with groups of second grade teachers.
4. To demonstrate the feasibility of using classroom teachers to translate objectives into specific teacher objectives from the communique and teacher manual.
5. To demonstrate the feasibility of using classroom teachers to construct student behavioral objectives for telelessons 32 and 33 of the Wonderful You series.
6. To demonstrate the feasibility of the construction of an instrument to evaluate teacher learning from the communique and manual materials.

7. To demonstrate the feasibility of the construction of an instrument to evaluate student learning from the Wonderful You telelessons 32 and 33.
8. To compare the level of achievement of second grade children who have and who have not viewed telelessons 32 and 33 of the Wonderful You series. Those children who view the program will be taught by teachers who have had four different methods of preparation for teaching the particular lessons in question.
9. To ascertain the quantity and quality of learning of teachers exposed to the communique, manual or both.
10. To test the feasibility of using junior college students to administer the prototype student achievement test.

PROCEDURES

The procedures of this study are presented in four major sections: development of evaluation devices, selection of subjects, administration of evaluation devices to teachers and administration of evaluation devices to students.

Development of Evaluation Devices

Four primary evaluation or assessment devices were developed as part of this study. Following is a brief description of the development of each of these devices.

Communique and Manual Evaluation Forms

In order to provide a comprehensive evaluation of instructional television it was necessary to develop instruments to evaluate both communique and manual. After careful and extensive examination and thorough analysis many evaluation

devices, and a careful review of a number of communiques, a 19 item instrument was developed for evaluation of each communique. The teacher is asked to rate a series of statements about each communique watched. The ratings range from 1 to 5 with 0 being used if the statement does not apply to the particular communique. The communique evaluation form can be used with any communique, one form being completed by each teacher for each communique watched. A copy of the communique evaluation form is found in Appendix I.

A manual lesson evaluation form consisting of 20 items was developed. The device was constructed in such a manner that it can be used with any lesson in any manual that is published by GETV. It is based on a composite of many forms examined as well as interviews with experts in the field of evaluation. The teacher is asked to rate, on a scale of 1-5, a series of questions about each lesson in the manual. One form is completed for each lesson that is evaluated. In addition a seven item scale was developed that is completed once for the total manual. A copy of the manual evaluation form can be found in Appendix J.

Development of Prototype Teacher Achievement Test

The communique designed to accompany lessons 32 and 33 of the Wonderful You series is a summary of an interview with the Director of the Metropolitan Atlanta Area Planning Commission. The manual materials provided additional factual information for the classroom teacher. It was decided, because of the nature of the materials, to determine what factual information teachers would retain from studying these learning aids. The first step was to determine the behaviors that the teachers should possess as a result of their experiences with the communique and/or manual. Two experienced second grade classroom teachers were given informal instruction in the preparation of

behavioral objectives. They were instructed to study Preparing Instructional Objectives (Mager, 1962) and also to read several provided articles dealing with the nature and preparation of behavioral objectives. These experienced teachers viewed the communique several times and also reviewed the manual materials concerned with these same lessons. The end product was a set of teacher behavioral objectives based on these teaching aids (See Appendix K).

Based on the behavioral objectives, a composite 20 item teacher achievement test was constructed by the two experienced consulting teachers. This test encompasses the behavioral objectives developed for teachers and serves only as a prototype achievement test. It is by no means comprehensive but does illustrate the type device that can be developed for assessing teacher behavior. See Appendix L for a copy of this test.

Development of Student Achievement Test

In order to determine the learning that might result from students viewing telelessons 32 and 33 of the Wonderful You series it was necessary to establish the objectives of the telelessons. The experienced classroom teachers that were trained to conduct the establishment of the behavioral objectives for the communiques and manuals were also employed to devise student behavioral objectives. The two teachers again viewed each telelesson at least twice for purposes of obtaining the behavioral objectives (See Appendix M).

After the behavioral objectives were devised, a 25 item achievement test was designed. This test was designed in such a manner that it could be administered in a reasonable time by individuals with a minimal of training in test administration. (See Appendix N)

Selection of Subjects

Individuals who were to participate in the pilot evaluation were selected by the Social Science Curriculum Director of a large school system in Georgia. The curriculum director located 30 teachers in the school system whose classes were regular or irregular viewers of Wonderful You. These thirty teachers and their classes were randomly assigned by the curriculum director to one of three groups; (Group 1) view only Communique, (Group 2) view Communique and study Manual, (Group 3) study Manual only. Such group designations were made to describe the type preparation that each teacher received before her children viewed telelessons 32 and 33 of the series. In addition, the curriculum director identified 20 teachers and classes who were non-viewers of the series. These teachers and their classes were assigned randomly to two groups; (Group 4) view only lessons 32 and 33, and (Group 5) no view or Control group. As part of the selection procedures the teachers in Groups 2 and 3 were asked to study the manual materials for lessons 32 and 33 in their usual manner.

Administration of Evaluation Devices to Teachers

On the afternoon of the 6th of April, 1970 the teachers in Groups 1, 2, 3, and 5 met in a central location in the school system. The teachers in Groups 1 and 2 met together in one room and viewed the communique that was broadcast at 4:00 p.m. After viewing the communique the teachers in both groups were asked to complete a communique evaluation form and also the prototype teacher achievement test. In addition the teachers in Group 2 were asked to complete a manual evaluation form for lessons 32 and 33.

The teachers in Group 3 met in a separate room and completed a manual evaluation form for each lesson that they had studied (lessons 32 and 33) and also completed the prototype teacher achievement test. The teachers in Group 5

completed only the prototype achievement test. Due to a variety of reasons, not all teachers were able to participate in the evaluation sessions. The non-participants in the initial phase of the study were not included in the final teacher or student analyses. The number of teachers that were present from each group are summarized in Table 2-1.

TABLE 2-1

Number of Teachers and Classrooms Participating
In Pilot Testing of Wonderful You Communique and Manual Evaluation Forms

Group	Teachers	Classrooms Tested
1. Communique	9	4
2. Communique and Manual	7	4
3. Manual	8	2
4. Classes View Only Telelessons	-	4
5. Control	5	3

Administration of Evaluation Devices to Students

The classes of the teachers in Groups 1, 2, 3, and 4 viewed telelessons 32 and 33 at the normally scheduled time. All participating teachers were asked to conduct their class in the usual manner. The classes of the teachers in Group 4 were not regular viewers of the teleseries. However, the teachers were asked to let their classes view the program on the same dates as scheduled for Groups 1, 2, and 3. The classes of teachers in Group 5 did not view either telelesson.

Classes were randomly selected from each group for testing purposes. Four classes were chosen from each group. However, due to unavoidable delays, all

classes were not tested. The student achievement test was administered to the classes in Groups 1, 2, 3, and 4 by junior college students especially trained to do this job. The principal investigators of this study administered the achievement test in the classrooms of the control group, Group 5. A summary of the number of classrooms tested is presented in Table 2-1.

ASSUMPTIONS OF STUDY

Following are several assumptions that have been made in conjunction with the design of this experiment. It was assumed that the

1. choice of teachers and their assignment to groups was random.
2. teachers were honest in their ratings of the communique and manual.
3. teachers who were asked to study the manual materials prior to the meeting on the 6th of April did in deed study the materials.
4. student achievement test were administered in a proper manner.
5. test and rating instruments were valid and reliable.
6. teachers did in deed have their classes view telelessons 32 and 33.
7. teachers taught their classes in the normal manner and made no special preparation for the student testing.

LIMITATIONS OF STUDY

Following are two of the major limitations of this study.

1. Because of the pilot nature of this study only a small group of teachers were involved thereby limiting generalization of findings.
2. Because of the mechanics of initial contact, some teachers who were selected to participate did not.

RESULTS AND DISCUSSION

The results of this study are divided into three major parts: rating scales, teacher achievement, and student achievement. Following is a brief summary of the results obtained in construction and administration of the assessment devices constructed as part of this study.

Rating Scales

In Table 2-2 a summary of the ratings of the communique may be found. Included in the table and the item on the rating scales, a tabulation of each rates responses, and an average rating. The range of mean ratings for the Communique Only group was from fair (1.89) to above average (3.89). On the average scheduling of this particular communique was rated fair (1.89) and the accuracy of material presented in communique above average (3.89). In contrast the group that had studied the manual prior to viewing the communique yielded somewhat higher ratings. The range of the ratings was from 2.11 to 3.86. The lowest ratings (2.11) for this group was obtained on practicalness of television teacher suggestions. The high mean rating was on organization of the communique (3.86). Overall, both groups rated the communique above average, with the majority of items receiving a mean rating of approximately 3.

TABLE 2-2

Summary Ratings of Wonderful You Communique

Item	Communique N=9						Communique and Manual N=7					
	1	2	3	4	5	$\bar{X}$	1	2	3	4	5	$\bar{X}$
1. The extent to which this communique will aid you in your classroom teaching.		4	4	1		2.67		3	2		2	3.14
2. Effectiveness of presentation.	1	3	2	2	1	2.89			5	2		3.29
3. The extent to which topics presented in the communique are relevant to your teaching situation.	2	3	3		1	2.44		1	5		1	3.14
4. Usefulness of information provided by the communique.		3	5	1		2.89		1	4	1	1	3.29
5. Clarity of communique objectives.	2	2	2	1	2	2.89			4	3		3.43
6. The effectiveness of the format of the communique.		1	6	2		3.11		2		3	2	3.71
7. Organization of the communique.			2	7		3.78			2	4	1	3.86
8. Extent you feel that you will be able to incorporate the suggested teaching techniques into your classroom.		4	5			2.56		3	1	1	2	3.29
9. Scheduling of this particular communique.	5	1	2	1		1.89	2	2	2		1	2.43
10. Accessibility of resources suggested in this communique.	2	3	4			2.22		2	4	1		2.86
11. Value of guest lecturer or presenter (if applicable).	2	2	2	2	1	2.78	1	1	2	2	1	3.14
12. Practicalness of television teacher suggestions.		2	5	2		3.00		3	3	1		2.11

Note: The numbers represent frequency of individual responses to each rating category

Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 Excellent

TABLE 2-2 (Cont'd)

Summary Ratings of Wonderful You Communique

	Item	Communique N=9						Communique and Manual N=7					
		1	2	3	4	5	$\bar{X}$	1	2	3	4	5	$\bar{X}$
13.	Emphasis and amount of time given each lesson covered in the communique.		2	5	1	1	2.89		1	6			2.22
14.	Accuracy of material presented in communique.			4	2	3	3.89		1	5	1		3.11
15.	Will directly contribute to the subject matter of your class.		5	2	2		2.67		3	1	2	1	3.14
16.	Will enrich the instructional program of your class.		3	5	1		2.78	1	1	4	1		2.11
17.	Will help you stimulate student interest in the subject.		4	2	2	1	3.00			5	1	1	3.43
18.	Contains materials usable for follow-up activities.	1	1	5	1	1	3.00		1	4	2		3.14
19.	Will help you structure content in a manner that will help students realize the objectives of the entire series of instructional television programs.		2	6	1		2.89		2	2	3		3.14
20.	Will help you structure content in a manner that will help students realize the objectives of the course.		3	5	1		2.78		2	3	1	1	3.14
21.	Overall worth of the communique in terms of the time that you spent watching it.	3	2	2	2		2.33		1	3	2		3.43

Note: The numbers represent frequency of individual responses to each rating category

Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 = Excellent

A summary of the evaluation of the manual materials accompanying Wonderful You telelessons 32 and 33 may be found in Tables 2-3 and 2-4. Reproduced in the tables and the statements to be rated, a summary of frequency of each rating and an average rating by each group for each statement. The first 19 items pertain to the individual lessons while the last seven refer to the manual and its physical makeup.

The mean ratings of lesson 32 by the Manual Only group ranged from 2.85 to 3.50 with the majority of the items being rated at or near the mean of 3. The lowest rating was on "adaptability of lesson materials for classroom use (2.85)". The highest ratings being on "unity of lesson ideas, suggestions for follow-up exercises after each lesson, practicalness of pre-television exercises, appeal of lesson content to students and definitions of new and unfamiliar terms." All of the above statements were given a mean rating of 3.50. In contrast the Communique and Manual group mean ratings ranged from a low of 1.67 to a high of 3.83. This group rated the difficulty level for the students at 1.67 (no indication is made as to whether they felt the lessons were too difficult or too easy for the students). A high rating of 3.83 was obtained on the "accuracy of the lesson material". The ratings of the "physical aspects of the manual" ranged from 2.67 to 4.17 with most ratings being between 3 and 4 for both groups. There was general agreement among the two groups regarding inadequacy of the appendix and supplementary materials. The group felt that the adequacy of print size and type was above average.

TABLE 2-3

Summary of Evaluations of Manual Materials Accompanying Wonderful You Telelesson 32

Item	Manual Group 1	2	3	4	5	$\bar{X}$	Communique and Manual 1	2	3	4	5	$\bar{X}$
1. Comprehensiveness of information in manual available for teaching.		2	4	2		3.00		1	4	1		3.00
2. Unity of lesson ideas.		2		6		3.50			4	2		3.33
3. Degree of correlation of lesson with state textbook guides.	1		5	1		2.85	2	3		1		2.00
4. Suggestions for follow-up exercises after each lesson.			4	4		3.50		2	2	2		3.00
5. Practicalness of follow-up exercises.		2	3	2	1	3.25		3	1	2		2.83
6. Suggestions for pre-television exercises.	1	1	3	3		3.00		1	3	2		3.17
7. Practicalness of pre-television exercises.		1	2	5		3.50		2	2	2		3.00
8. Availability of materials and/or equipment required for follow-up exercises.		1	6	1		3.00		1	4	1		3.00
9. Availability of materials and/or equipment required for pre-television exercises.	1		6		1	3.00		1	5			2.83
10. Appeal of lesson content to students.		1	3	4		3.50		4	1	1		2.50
11. Level of difficulty for students.	1	2	3	2		2.75	3	2	1			1.67
12. Adequacy of lesson bibliography.	1		1	3	2	3.63		1	3	2		3.33
13. Articulation of this lesson with related lessons.		1	4	3		3.25		2	2	2		3.00
14. Definitions of new and unfamiliar terms.			2	6		3.50		1	2	3		3.33

Note: The numbers represent frequency of individual response to each rating category.
Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 = Excellent

TABLE 2-3 (Cont'd)

Summary of Evaluations of Manual Materials Accompanying Wonderful You Telelesson 32

Item	Manual Group 1	2	3	4	5	$\bar{X}$	Communique and Manual 1	2	3	4	5	$\bar{X}$
15. Accuracy of lesson material.			5	3		3.50			1	5		3.83
16. Readability of lesson material.		2	6			2.75	1	1	1	3		3.00
17. Adaptability of lesson material for classroom use.		2	5	1		2.88		2	1	3		3.17
18. Adequacy of illustrative material.			6	2		3.25		1	4	1		3.00
19. Usefulness of appendix and supplementary materials.		1	6	1		3.00		3	2	1		2.67
20. Integration of illustrative material with text.		1	5	2		3.13			5		1	3.33
21. General physical appearance of manual.		1	2	2	3	3.88			4	2		3.33
22. Convenience of left hand binding.			4	2	2	3.75			3	3		3.50
23. Adequacy of print size and type.			1	5	2	4.00				5	1	4.17
24. Use of center and side headings.			3	2	3	4.00			3	3		3.50
25. Size of manual (outside dimensions).			4	3	1	3.63		1	2	2	1	3.50
26. Type of bindings.	1		2	3	1	3.43		1	4		1	3.17

Note: The numbers represent frequency of individual responses to each rating category.

Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 = Excellent

A summary of the results of the evaluation of the manual materials for lesson 33 of the Wonderful You series reveals that the Manual Only group rated the materials in a range from 2.75 to 4.00. The lowest mean rating was recorded for the availibility of equipment and materials required for both follow-up and pre-television lessons (2.75). The maximum mean ratings was on the unity of lesson ideas (3.57). The Communique and Manual group ratings ranged from 1.86 to a maximum of 3.57. As with the previous lesson, the feeling was that the level of difficulty was not an appropriate level (no indication was made of whether they thought the level was too difficult or too easy). The high rating was on the suggestions for pre-television and post-television activities (3.57). The groups feel that the ideas for activities associated with the telelessons are of value but they do not have available the materials are equipment necessary to put these activities to use.

In general, the ratings of the overall value of the communique tended to be somewhat higher for the group that had studied the manual prior to viewing the communique. In contrast this same group tended to rate the overall value of the manual lower than the group that had only studied the manual. It would appear, based on this limited data, that there is an interaction affect between the manual and communique.

TABLE 2-4

Summary of Evaluations of Manual Materials Accompanying Wonderful You Telelesson 33

Item	Manual Group 1	2	3	4	5	X	Communique and Manual 1	2	3	4	5	X
1. Comprehensiveness of information in manual available for teaching.	1		3	4		3.75			5	2		3.29
2. Unity of lesson ideas.			1	6	1	4.00			4	2	1	3.57
3. Degree of correlation of lesson with state textbook guides.			7	1		3.13	2	2	2	1		2.29
4. Suggestions for follow-up exercises after each lesson.			3	3	2	3.88		1	2	3	1	3.57
5. Practicalness of follow-up exercises.		1	3	3	1	3.50		1	5	1		3.00
6. Suggestions for pre-television exercises.			4	4		3.50		2		4	1	3.57
7. Practicalness for pre-television exercises.	1		3	4		3.25		1	2	4		3.43
8. Availability of materials and/or equipment required for follow-up exercises.	1	2	3	2		2.75		2	4	1		2.86
9. Availability of materials and/or equipment required for pre-television exercises.	3		1	4		2.75		1	5	1		3.00
10. Appeal of lesson content to students.			3	5		3.83	1	3		2	1	2.86
11. Level of difficulty for students.	2		4	2		2.75	3	2	2			1.86
12. Adequacy of lesson bibliography.		2	3	2		3.25			5	2		3.29
13. Articulation of this lesson with related lessons.		1	4	3		3.25		1	4	2		3.14
14. Definitions of new and unfamiliar terms.		1	6	1		3.00	1		3	3		3.18

Note: The numbers represent frequency of individual responses to each rating category.
Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 = Excellent.

TABLE 2-4 (Cont'd)

Summary of Evaluations of Manual Materials Accompanying Wonderful You Telelesson 33

Item	Manual Group 1	2	3	4	5	$\bar{X}$	Communique and Manual 1	2	3	4	5	$\bar{X}$
15. Accuracy of lesson material.			5	3		3.50			4	2	1	3.57
16. Readability of lesson material.			3	5		3.63	1	1	1	3	1	3.29
17. Adaptability of lesson material for classroom use.	1		2	5		3.38		3	2	2		2.86
18. Adequacy of illustrative material.			6	2		3.25		1	5	1		3.00
19. Usefulness of appendix and supplementary materials.		1	4	3		3.25			6	1		3.14
20. Integration of illustrative material with text.		1	4	3		3.25		1	3	2	1	3.43
21. General physical appearance of manual.		1	2	3	1	3.57			2	4	1	3.86
22. Convenience of left hand binding.			4	2	2	3.75			4	1	2	3.71
23. Adequacy of print size and type.			3	3	2	3.88			1	4	2	4.14
24. Use of center and side headings.			3	2	2	3.86			3	3	1	3.71
25. Size of manual (outside dimensions).			5	2	1	3.50		1	4	2		3.14
26. Type of binding.			5	2	1	3.50		2	3	2		3.00

Note: The numbers represent frequency of individual responses to each rating category.

Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 = Excellent.

Teacher Achievement

The results of the administration of the prototype teacher achievement test are presented in Table 2-5 for each of the four groups of teachers. The mean score for the groups ranged from 14.7 (group that studied the manual and viewed the communique) to 12.6 (control group). The standard deviation of the tests scores ranged from 2.26 to 3.63. An examination of the data reveals that the teachers who studied both the manual and viewed the communique did achieve somewhat higher than teachers in either of the other groups. Teachers who viewed only the communique achieved slightly higher than teachers who studied only the manual (14.1 versus 13.3). The control group, as would be expected achieved the lowest mean score of 12.6.

There is some merit in the teacher studying the manual and viewing the communique. Based on the absolute values of the mean achievement test scores teachers who study only the communique perform more satisfactorily than those who study only the manual. An examination of the median test scores, however, shows that there is no difference in score for these groups (13.5 for both).

of variance (Table 2-6) was made of the data obtained for the groups. The F-value of .50 was not significant, indicating no difference in the level of achievement of the four groups of teachers on the prototype achievement test.

TABLE 2-5

Descriptive Statistics for Four Teacher Groups on Twenty Item Achievement Test Covering Content of Communique and Manual of Wonderful You Telelessons 32 and 33

Statistic	View Communique and Study Manual N = 7	View Communique Only N = 8	Study Manual Only N = 8	No View or Study N = 5
Mean	14.7	14.1	13.3	12.6
Median	15.0	13.5	13.5	12.0
Standard Deviation	3.15	2.26	3.63	2.33
Range	11(8-18)	8(11-18)	13(6-18)	8(10-17)

Table 2-6

Summary of Analysis of Variance for Four Teacher Groups on Twenty Item Achievement Test Covering Content of Communique and Manual Wonderful You Telelessons Number 32 and 33

Source of Variation	Sum of Sqs.	D.F.	Mean Sq.	F
Among Treatment	15.4	3	5.1	.50
Within Treatments	243.3	24	10.2	
Total	258.7	27		

Student Achievement

The frequency distributions and descriptive statistics for the student achievement test for Wonderful You for each of the five groups are summarized in Table 2-7. The range of scores for the group whose teacher had studied the manual and viewed the communique was from 9 to 22 with a mean score of 15.56. The group whose teacher had studied only the manual had a score range of 9 to 19 with a mean of 14.63. The range of test socres for the classes whose teachers only viewed the communique ranged from 7 to 21 with a mean of 14.03. The students who only viewed the program (teachers had no special training nor had they reviewed any materials) obtained a mean score of 12.96 with a range of scores from 7 to 19. The control group scores reflected their lack of knowledge of the subject. The score range was from 6 to 18 with a mean of 12.07.

TABLE 2-7

Frequency Distributions and Descriptive Statistics for Wonderful You Student Achievement Test Data

Score	Communique & Manual		Manual	Communique		Student View Only		Control	
	Total	I.A. Group[2]	Total[3]	Total	I.A. Group	Total	I.A. Group	Total	I.A. Group
25[1]									
24									
23									
22	1	1							
21	2			1	1				
20	6	2							
19	6		3	3	3	1	1		
18	15	5	3	5	5	1	1	1	
17	23	9	3	5	3	2	1	3	1
16	9	4	7	12	8	16	10	2	2
15	18	9	8	13	8	16	1	7	4
14	17	7	7	19	10	15	8	10	6
13	13	5	5	9	2	11	6	7	4
12	4		2	15	4	10	5	11	9
11	4	3	4	8	4	12	2	22	14
10	3	2	1	1	1	10	5	9	5
9	3	3	1	1	1	6	5	5	4
8						5	3	1	1
7				2		2	2	1	
6									
N	124	50	44	94	50	107	50	80	50
$\bar{X}$	15.77	14.94	13.89	14.08	14.88	12.89	12.68	12.01	12.02
S	2.70	2.89	2.46	2.55	2.56	2.64	3.03	2.36	2.03
KR20		.34	.13		.22		.43		-.27

[1]Maximum score = 25
[2]Group used in item analysis (I.A.)
[3]Total and I.A. Groups same

In order to determine the reliability of the achievement test, a sample of 50 papers was drawn at random from each group of test papers. In the case of the manual only group, the total sample (N = 44) was used. Reliability was estimated by use of the Kuder-Richardson Formula 20. The reliability of the test was somewhat disappointing.

An analysis of variance was performed to determine if there was any significant differences in achievement levels between the five groups. A summary of this analysis of variance is found in Table 2-8. A significant F of 179.5 was obtained, indicating that there was a difference in the groups.

In order to ascertain where the significant differences were, Duncan's New Multiple Range Test (Kramer, 1956) was applied to the differences between treatment means. There were significant differences between all groups except for the manual only and communique only groups. A summary of these results are presented in Table 2-9.

The group whose teachers studied the manual and viewed the communique achieved significantly higher than the other groups. There is little difference in the groups whose teachers had studied only the manual or viewed only the communique.

Table 2-8

Summary of Analysis of Variance of Student Achievement Test Data for Wonderful You Telelessons 32 and 33

Source of Variation	Sum of Sqs.	d.f.	Mean sq.	F
Between Treatments	2438.8	4	609.7	179.5**
Error	1509.6	444	3.40	
Totals	3948.4	448		

**Significant at the .01 level.

Table 2-9

Duncan's New Multiple Range Test Applied to Differences Between Treatment Means of Table 2-8 for Student Wonderful You Achievement Data*

Communique and Manual	Manual	Communique	Visual Only	Control
15.77	13.89	14.08	12.89	12.01

*Any two treatment means not underscored by the same line are significantly different. Any two treatment means underscored by the same line are not significantly different.

CONCLUSIONS

The following conclusions are based on the data and analysis of this study.

1. Teachers who have studied both the appropriate manual materials and viewed the communique tend to make a higher score on the prototype teacher achievement test than teachers in other groups.

2. The next highest teacher mean score was made by the group who only viewed the communique. This group was followed by the manual only group. From a statistical standpoint, however, teacher achievement is not significantly influenced by manual or communique.

3. Whether or not a teacher uses the manual material and/or views the communique does have a significant positive influence student achievement. The groups ordered themselves as follows: 1) Communique and Manual, 2) Manual Only, 3) Communique Only and, 4) Student View Only.

4. Just viewing television does result in some student learning.

5. It is possible to evaluate efficiently the communique and manuals that accompany GTV series.

6. Although results in the present study were relatively adequate, it is suggested that considerable training is required to bring teachers to a level of proficiency in stating behavioral objects based on manual and communique material that can readily be used for test item construction.

7. It is possible for relatively unsophisticated (from measurement standpoint) teachers to construct either student or teacher achievement tests based on behavioral objectives.

Chapter 3

EVALUATION OF COMMUNIQUE AND TEACHER AIDS - PATTERNS

The previous chapter of this report focused on the evaluation of communique and teacher aids designed to accompany a second grade teleseries. In order to more fully pilot test the evaluation plan being developed an upper grades teleseries was chosen for investigation. The series chosen was a sixth grade program entitled Patterns. This 33 telelesson series uses a "discovery" oriented approach to basic sixth grade mathematics. The programs encourage student creativity and classroom participation, and are designed to help the student develop logical thinking patterns progressing from observing, guessing and generalization to predicting mathematical events. Because of the limitations of time and personnel this study focused on only two telelessons from Patterns and the corresponding communique and teacher aids. The lessons , Lesson 30, "Volume I," and Lesson 31, "Volume II," center on the basic concepts of volume and volume measurement.

OBJECTIVES OF STUDY

The primary objectives of this study are as follows: To

1. continue the evaluation of the rating scale for teacher communiques and manuals (see Chapter 2).
2. demonstrate the feasibility of using classroom teachers to derive or construct teacher objectives from the communique and teacher manual.
3. demonstrate the feasibility of using classroom teachers to derive or construct student behavioral objectives suggested by viewing the tapes of telelessons 30 and 31 of the Patterns series.

4. demonstrate the feasibility of the construction of an observation schedule for evaluating teacher activities related to telelessons 30 and 31, of teachers in the classroom.
5. demonstrate the feasibility of the construction of an instrument to evaluate student learning from the Patterns telelessons 30 and 31.
6. measure the level of achievement of sixth grade children who have viewed and have not viewed telelessons 30 and 31 of the Patterns series. Those children that view the program will be taught by teachers who have been exposed to one of three different methods of preparation for teaching the particular lessons.
7. test the feasibility of using junior college students to administer the observation schedule developed for this study and to administer the student achievement test.

PROCEDURES

The procedures of this study are divided into four major parts: development of evaluation devices, selection of subjects, administration of evaluation devices to teachers and administration of evaluation devices to students.

Development of Evaluation Devices

Four primary evaluation or assessment devices were used in this study. Following is a brief description of each of these devices.

Communique and Manual Evaluation Forms

The two instruments designed to evaluate the communiques, and manuals developed to accompany the teleseries produced by the Georgia Educational Television Network described in the previous chapter were again used, at this time with groups of sixth grade teachers using Patterns. (See Appendices I and J)

Development of Prototype Teacher Observation Schedule

The communique designed to accompany lessons 30 and 31 of the Patterns series is concerned with a number of suggestions of activities and procedures for use in the sixth grade classroom. The manual materials provide additional materials and suggestions for classroom activities. If these materials are perceived to be of help to the teacher, teachers should make some use of them. If the teacher is using this additional help, it should be reflected in the behavior that is exhibited in the classroom. It was felt that the frequency with which such measurements of behavior were exhibited would be an index of the import of the teacher aids. An observation schedule was considered to be the best assessment device for the given purpose.

Construction of the Patterns Observation Summary

(POS) began with the specification of the behaviors that the classroom teacher might exhibit as a result of having been exposed to the learning aids: communique and manual. In order to determine the behaviors that might be exhibited, two experienced sixth grade classroom teachers were given informal instruction in the preparation of behavioral objectives. They were instructed to study Preparing Instructional Objectives (Mager, 1962) and also to read several articles, related to the nature and specification of behavioral objectives provided by the project staff. These materials were discussed with the teacher. These experienced teachers viewed the communique several times and also reviewed the manual materials concerned with these same lessons. They proceeded to construct a set of teacher behavioral objectives based on these teaching aids. The objectives were converted into statements which if observed in the classroom would

fall into one of three categories: "Teacher Gives," "Teacher Asks," and "Pupil(s) Responds." The POS is similar in nature to the OSCAR 4V Observation Schedule and Record (Medley, Impellitteri and Smith, 1967). See Appendix O for a list of the teacher objectives derived from Patterns telelessons 30 and 31.

The POS consists of 75 statements, 52 of which deal with Patterns telelesson 30 and 23 with Patterns telelesson 31. The last sheet of the POS is a checklist of materials that teachers might use in their classroom. The materials listed are taken from the Post-Lesson Activities suggested in the Teacher's Manual for lessons 30 and 31. The POS is a prototype instrument that will serve only for the evaluation of the two lessons in question. However, the sample principles can be applied to the development of similar type observation schedules for other telelessons or teleseries. Appendix P contains a copy of the Patterns Observation Summary.

Development of Student Achievement Test

In order to assess the learning that might result from students viewing telelessons 30 and 31 of the Patterns series it was necessary to establish the objectives of the telelessons. The two experienced classroom teachers that were trained to conduct the establishment of the behavioral objectives for the communique and manual were also employed to derive student behavioral objectives. These teachers viewed each telelesson at least twice for purposes of deriving the behavioral objectives. See Appendix Q for a list of student behavioral objectives for Patterns telelessons 30 and 31.

After the behavioral objectives were derived, an 18 item multiple choice test was constructed. This test was designed in such a manner that it could be administered in a reasonable time by individuals with a minimum of training in test administration. The test is intended to assess sixth grade students' achievement as a result of viewing telelessons 30 and 31 of the Patterns series. The test is centered on the topics of space figures, space regions and simple closed surfaces, and determining the volume of cubes and rectangular prisms. See Appendix R for a copy of this student achievement test.

Selection of Subjects

Subject selection was made by the curriculum directors in two large school systems in Georgia. It was necessary to use two different school systems as it was not possible to locate a large enough sample of teachers in one system that was using Patterns as part of their classroom routine. The curriculum director of one system located 14 teachers whose sixth grade classes were regular or frequent viewers of Patterns. The curriculum director of the second school system located four additional teachers whose classes were regular or frequent viewers of Patterns. In addition four sixth grade classes were identified that were not viewers of instructional television. These classrooms served as control classes. The teachers and their classes were randomly assigned by the curriculum director in the first system to one of two groups; (Group 1) Manual only and (Group 2) view Communique only. The teachers and classes in the second system were assigned to (Group 3) view the Communique and study the Manual. The Control group is designated as Group 4. The designation given to each group refers

to the type of preparation that each teacher received or activity engaged in before her children viewed telelessons 30 and 31 of the series. As part of the selection procedure, the teachers assigned to Groups 1 and 3 were asked to study, in their usual manner, the manual materials for lessons 30 and 31.

Selection and Training of Observers

In order to gather data with the POS by observing teachers and their classes, it was necessary to select and train observers. In the vicinity of both school systems are junior colleges that are part of the junior college system operated in part or wholly by the Regents of the State of Georgia. Appropriate personnel at these colleges were contacted and asked for assistance in identifying a group of twenty students that could be hired and trained to administer the POS. Twenty students were identified and asked to meet for a training session on the evening of the 13th of April. These observers were briefed on the purposes of the Georgia Educational Television Project and viewed a training film related to observation techniques. After viewing the training film, the observers were given specific instruction in the use of the POS and etiquette related to their visit to the classes selected for observation.

Administration of Communique and Evaluation Devices to Teachers

On the afternoon of the 13th of April, 1970 the teachers in Groups 1 and 2 met in a central location in the school system with members of the project staff. The teachers in Group 1 met in one room and viewed the Patterns Communique that was broadcast at 3:30 p.m. and also completed the communique evaluation form. This communique was Number 8 in the series for the year and related to lessons 30 and 31 of the series. The teachers

in Group 2 met in a separate room and completed the manual evaluation form. The teachers in Group 3 met in a central location in their school system. They viewed the communique that was broadcast at 3:30 p.m., completed the communique evaluation form and the manual evaluation forms. Table 3-1 summarizes the number of teachers that were present from teach group to evaluate the teacher aids.

Table 3-1

Number of teachers and Students Participating in Pilot Testing of Various Patterns Evaluation Devices

Group	Teachers	Students Tested
1. Manual	7	164
2. Communique	7	218
3. Communique and Manual	4	109
4. Control	4	124

At the close of the evaluation session, the teachers participating were told that an observer might enter their classroom to observe their activities related to mathematics, and that they as teachers would not be evaluated. All teachers were observed the day before and after the telecast of the two lessons, 30 and 31. Observers were scheduled to arrive at or near the beginning of the mathematics class they were to observe. Each observation lasted approximately thirty minutes. The observer would enter the classroom quietly, sit at the back of the room, observing and recording on his schedule for the thirty minute period and quietly make his exit at the end of the period.

Administration of Achievement Test to Students

The classes of the teachers in Groups 1, 2, and 3 viewed telelessons 30 and 31 at the time they were normally presented. The teachers were asked to conduct their classes in the usual manner. The classes of the teachers in Group 4 did not view the lessons. The classes were tested by the junior college students who had been trained to administer the POS. Table 3-1 presents a summary of the number of sixth grade students who completed the prototype sixth grade achievement test.

ASSUMPTIONS OF THE STUDY

Following are several assumptions that have been made in conjunction with the design of this experiment. It was assumed that the

1.) choice of teachers and their assignment to Groups 1 and 2 was random within acceptable limits

2.) teachers were honest in their ratings of the communique and manual

3.) teachers who were asked to study the manual materials prior to the meeting on the 13th of April, did in deed study the materials

4.) student achievement tests were administered in a valid and reliable manner

5.) test and rating instruments were valid and reliable

6.) teachers did have their classes view telelessons 30 and 31 of the Patterns series

7.) teachers taught their classes in the normal manner and made no special preparation for the student testing

8.) POS is a valid and reliable observation instrument

9.) POS was used in a proper manner by the observers.

LIMITATIONS OF STUDY

Following are two of the major limitations of this study. Other limitations did exist.

1. Because of the pilot nature of this study only a small group of teachers was involved, thereby limiting generalization of findings.
2. Due to nature of mechanics of initial contact some teachers who were selected to participate did not.

RESULTS AND DISCUSSION

The results of this study are divided into three major parts: rating scales, Patterns Observation Summary, and student achievement. Following is a brief summary of the results obtained in construction and administration of the assessment devices used as part of this study.

Rating Scales

Table 3-2 presents a summary of the ratings of the communique that was viewed by each group of teachers. Item statements, together with frequencies of response to each rating category, and an average rating by group can be found in the table.

The range of mean ratings for the Communique Only group was from 1.43 to 4.29. At the extremes are the "scheduling of this particular communique (1.43)"and on the high side "the effectiveness of presentation (4.29)". In contrast to the Communique Only group the Communique-Manual group, who had studied the manual prior to viewing the communique rated the communique somewhat higher. The range of mean ratings for the Communique-Manual group was from 2.25 to 4.50. The lowest mean ratings for this group was obtained on two items, "extent to which topics presented in

TABLE 3-2

Summary Ratings of Patterns Communique

Item	Communique N=7						Communique and Manual N=4					
	1	2	3	4	5	$\bar{X}$	1	2	3	4	5	$\bar{X}$
1. The extent to which this communique will aid you in your classroom teaching.		4	1	2		2.71			3	1		3.25
2. Effectiveness of presentation.			2	3	2	4.29		1	1	2		3.25
3. The extent to which topics presented in the communique are relevant to your teaching situation.		1	3	2		2.71		3	1			2.25
4. Usefulness of information provided by the communique.		1	4	1	1	3.29			2	1		2.50
5. Clarity of communique objectives.			2	5		3.71			1	1	2	4.25
6. The effectiveness of the format of the communique.			2	5		3.71			2		2	4.00
7. Organization of the communique.			1	4	2	4.14				2	2	4.50
8. Extent you feel that you will be able to incorporate the suggested teaching techniques into your classroom.			4	3		3.43		1	2		1	3.25
9. Scheduling of this particular communique.	3	2	1			1.43		1	1	1	1	3.50
10. Accessibility of resources suggested in this communique.	4	1	2			1.71	1	1		1	1	3.00
11. Value of guest lecturer or presenter (if applicable).			2	4		3.14				2	2	4.50
12. Practicalness of television teacher suggestions.			3	2		2.71			2	1	1	3.75

Note: The numbers represent frequency of individual response to each rating category

Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 = Excellent

TABLE 3-2 (Cont'd)

Summary Ratings of Patterns Communique

Item	Communique N=7						Communique and Manual N=4					
	1	2	3	4	5	X	1	2	3	4	5	X
13. Emphasis and amount of time given each lesson covered in the communique.			5	2		3.29	1		1	2		3.00
14. Accuracy of material presented in communique.		1		4	2	4.00				2	2	4.50
15. Will directly contribute to the subject matter of your class.		2	3	2		3.00		1	1	1		3.00
16. Will enrich the instructional program of your class.		1	3	1	1	2.86			3			3.00
17. Will help you stimulate student interest in the subject.			1	5	1	4.00			1	1	2	4.25
18. Contains materials usable for follow-up activities.		1	4	2		3.14		1		2	1	3.75
19. Will help you structure content in a manner that will help students realize the objectives of the entire series of instructional television programs.			7			3.00		2	1			2.33
20. Will help you structure content in a manner that will help students realize the objectives of the course.		1	4			3.14		3	1			2.25
21. Overall worth of the communique in terms of the time that you spent watching it.		2	3	2		3.00		1	1	1	1	3.50

Note: The numbers represent frequency of individual response to each rating category.

Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 = Excellent

the communique was relevant to the teaching situation" and "the help that it gives the teacher in structuring content in a manner that will help students realize the objectives of the course"(2.25). The high mean ratings were on "organization of the communique," "value of the guest lecturer," and "accuracy of material (1.50)". The rating extremes presented for the Patterns communique parallel those presented for the evaluation of the Wonderful You communique.

In general the teachers in the Communique Only group felt that the following were of average value:

> "Usefulness of information provided by the communique
> The extent you feel that you will be able to incorporate the suggested teaching techniques into your classroom
> Value of the guest lecturer or presenter
> Emphasis and the amount of time given each lesson covered in the communique
> Will directly contribute to the subject matter of your class
> Contains material usable for followup activities
> Will help you structure content in a manner that will help students realize the objectives of the course
> The overall worth of the communique."

These same teachers also felt that "the accuracy of the materials presented," "the effectiveness of presentation" and "the organization of the communique" were above average.

The teachers in the Communique Manual group felt that the relevancy of the topics presented to their teaching and usefulness of information provided by the communique were below average.

Both groups of teachers rated the accuracy of the material contained in the communique high. They also agreed that the organization of the communique and the helpfulness of the communique in stimulating student interest in mathematics was above average. In contrast the teachers differed in their opinions of "the scheduling of the communiques". The Communique Only group rated this at 1.43, while the teachers using both

communique and manual favored the scheduling at the time it was shown (3.50). The overall worth of the communique was rated by both groups at about average or above average.

Tables 3-3 and 3-4 present a summary of the evaluation of the manual materials accompanying Patterns telelessons 30 and 31. Item statements, summaries of response frequencies, and an average rating by groups are presented in the table. The first 19 items pertain to the individual lessons while the last seven refer to the manual and its physical makeup.

The mean ratings of lesson 30 by the Manual Only group ranged from 2.29 to 4.43, with the majority of the items being rated from 3.00 to 4.00. The lowest rating was on the "level of difficulty for students" (no indication was available as to whether the teachers felt the lessons were too difficult or too easy for the students). The highest rating was given to the "accuracy of the lesson materials (4.43)". The mean ratings of lesson 30 by the Communique and Manual group ranged from 2.50 to 4.75, with the majority of items being rated from 3.50 to 4.00. In general this group rated the manual materials higher than the group that did not view the communique. The lowest mean rating was on the "degree of correlation of lesson with state textbook guides", while the high mean rating was on "readability of lesson material".

Teachers in both groups gave about equal ratings to the other items with notable difference in the "practicalness of follow-up exercises". The group that had viewed the communique indicated more relevance to the follow-up exercises than the group that did not see the communique. This would tend to indicate that there is some interaction between the two teacher aids.

TABLE 3-3

Summary of Evaluations of Manual Materials Accompanying Patterns Telelesson 30

Item	Manual Group						Communique and Manual					
	1	2	3	4	5	$\bar{X}$	1	2	3	4	5	$\bar{X}$
1. Comprehensiveness of information in manual available for teaching.			2	4	1	3.86			1	3		3.75
2. Unity of lesson ideas.			1	5	1	4.00				4		4.00
3. Degree of correlation of lesson with state textbook guides.		2	2	2	1	3.29	1		3			2.50
4. Suggestions for follow-up exercises after each lesson.		2		3	2	3.71				3	1	4.25
5. Practicalness of follow-up exercises.		3	2	2		2.86				2	2	4.50
6. Suggestions for pre-television exercises.		3	2	2		2.86	1		2	1		2.75
7. Practicalness of pre-television exercises.		2	2	2	1	3.29						3.50
8. Availability of materials and/or equipment required for follow-up exercises.		2	3	1	1	3.14			3		1	3.75
9. Availability of materials and/or equipment required for pre-television exercises.		1	2	1	3	3.86						4.00
10. Appeal of lesson content to students.		1	3	1	2	3.57		1		2	1	3.50
11. Level of difficulty for students.		5	2			2.29		1		1	2	3.00
12. Adequacy of lesson bibliography.			2	2	3	4.14		1	1	1	1	4.25
13. Articulation of this lesson with related lessons.			6	1		3.14		1	2	1		3.50
14. Definitions of new and unfamiliar terms.			4	3		3.43				3	1	3.50

Note: the numbers represent frequency of individual response to each rating category

Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 - Above Average, and 5 = Excellent

TABLE 3-3

Summary of Evaluations of Manual Materials Accompanying Patterns Telelesson 30

Item	Manual Group 1	2	3	4	5	$\bar{X}$	Communique and Manual 1	2	3	4	5	$\bar{X}$
15. Accuracy of lesson material.			1	2	4	4.43		1		3		4.33
16. Readability of lesson material.			2	3	2	4.00			3		1	4.75
17. Adaptability of lesson material for classroom use.			2	2	3	4.14			1		2	4.00
18. Adequacy of illustrative material.			3	4		3.27				1	3	4.00
19. Usefulness of appendix and supplementary materials.			2	2	3	4.14			1	2	1	4.00
20. Integration of illustrative material with text.			4	1	2	3.71			1	2	1	3.75
21. General physical appearance of manual.				4	3	4.43			1	3		4.25
22. Convenience of left hand binding.			1	4	2	4.14			1	3		3.75
23. Adequacy of print size and type.			1	3	3	4.29				3	1	4.00
24. Use of center and side headings.				4	3	4.43		1		2	1	3.75
25. Size of manual (outside dimensions).			2	2	3	4.14	1	1	1		1	2.75
26. Type of binding.		2	2	2	1	3.29	1	1	1		1	2.50

Note: The numbers represent frequency of individual response to each rating category.

Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 = Excellent

The mean ratings of lesson 31 (Table 3-4) by the Manual Only group ranged from 2.57 to 4.29, with the majority of the items being rated from 3.50 to 4.00. The lowest ratings were on "suggestions for follow-up exercises after each lesson" and "level of difficulty for student" of material. In contrast the highest rating was on "adequacy of lesson bibliography (4.29)". The mean ratings of lesson 31 by the Communique and Manual group ranged from 2.75 to 4.50, with the majority of the items being rated from 3.50 with state textbook guides"(2.75) while the highest rating was on "readability of lesson materials".

Teachers in both groups felt that the lesson ideas were well unified, the follow-up and pre-television exercises were practical and that the material was readily adaptable in the classroom. There is considerable difference in agreement between the two groups over the nature of the suggestions for follow-up exercises. The teachers in the Manual Only group gave this item a mean rating of 2.57 while the Manual and Communique teachers gave this item a mean rating of 4.25.

The ratings of the physical aspects of the manual (items 20 through 26) ranged from 3.29 to 4.43, for the Manual Only group and from 2.00 to 4.25 for the Manual and Communique group. In general the teachers were unsatisfied with the "type of binding" on the manual. In contrast they considered the "general physical appearance of the manual" and the "adequacy of print size and type" to be above average. The majority of the ratings were between 3.25 and 4.25 for both groups.

In general the two manual lessons were rated about equally by the two groups. However, there is an indication that the group that used

TABLE 3-4

Summary of Evaluations of Manual Materials Accompanying *Patterns* Telelesson 31

Item	Manual Group 1	2	3	4	5	$\bar{X}$	Communique and Manual 1	2	3	4	5	$\bar{X}$
1. Comprehensiveness of information in manual available for teaching.		1	2	4		3.43			1	3		3.75
2. Unity of lesson ideas.			2	5		3.71				4		4.00
3. Degree of correlation of lesson with state textbook guides.			3	4		3.57		1	3			2.75
4. Suggestions for follow-up exercises after each lesson.	1	2	3	1		2.57				3	1	4.25
5. Practicalness of follow-up exercises.			3	3	1	3.71			1	2	1	4.00
6. Suggestions for pre-television exercises.			2	4	1	3.86			1	3		3.75
7. Practicalness of pre-television exercises.			2	3	2	4.00			2	1	1	3.75
8. Availability of materials and/or equipment required for follow-up exercises.		1	1	5		3.57		1		1	2	4.00
9. Availability of materials and/or equipment required for pre-television exercises		1	2	3	1	3.57		1		1	2	4.00
10. Appeal of lesson content to students.			4	3		3.43		1	1	2		3.25
11. Level of difficulty for students.		3	3	1		2.71		1	2	1		3.00
12. Adequacy of lesson bibliography.			1	3	3	4.29				4		4.00
13. Articulation of this lesson with related lessons.			2	3	1	3.83			2	2		3.50
14. Definitions of new and unfamiliar terms.			5	2		3.29			2	1	1	3.75

Note: The numbers represent frequency of individual response to each rating category.

Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 = Excellent

TABLE 3-4

Summary of Evaluations of Manual Materials Accompanying Patterns Telelesson 31

Item	Manual Group						Communique and Manual					
	1	2	3	4	5	$\bar{X}$	1	2	3	4	5	$\bar{X}$
15. Accuracy of lesson material.		1	1	2	3	4.00			1	1	2	4.25
16. Readability of lesson material.		1		4	2	4.00			1		3	4.50
17. Adaptability of lesson material for classroom use.		1	2	3	1	3.57				3	1	4.25
18. Adequacy of illustrative material.	1	1	2	3		3.00		1	2	1		3.00
19. Usefulness of appendix and supplementary materials.				1	2	3.71		1	2		1	3.25
20. Integration of illustrative material with text.	1		1	5		3.43		1	1	2		3.25
21. General physical appearance of manual.				4	3	4.43				3	1	4.25
22. Convenience of left hand binding.			1	4	2					3	1	4.25
23. Adequacy of print size and type.				4	3	4.43				3	1	4.25
24. Use of center and side headings.			1	4	2	4.14			1	3		3.75
25. Size of manual (outside dimensions).			1	2	3	3.67	1	1	1	1		2.50
26. Type of binding.		1	4	1	1	3.29	1	1	1			2.00

Note: the numbers represent frequency of individual response to each rating category.

Rating Scale Used: 1 = Poor, 2 = Fair, 3 = Average, 4 = Above Average, and 5 = Excellent

both the communique and manual tended to rate the manual higher than the group that used only the manual. This would indicate that there is some interaction effects between the manual and communique. The teachers who view the communiques would appear to see more use of the manual materials. The general trends pointed out in this evaluation of the Patterns Manual by sixth grade teachers was also evidenced in the evaluation of the Wonderful You Manual conducted by second grade teachers (see Chapter 2 of this report).

Patterns Observation Summary

The results of the administration of the Patterns Observation Summary (POS) is shown in Tables 3-5 and 3-6. Table 3-5 summarizes the pre and post observation data of Lesson 30 and Table 3-6 summarizes the pre and post observation data of Lesson 31. Teacher groups are designated on the basis of the preparation they received during the study. The frequency and percentage out of the maximum possible of the three types of responses are listed as they occurred in the three groupings: Communique, Manual, and Communique and Manual. The number of items checked on the materials checklist and their percentages are also summarized.

The results of this part of the study were somewhat disappointing. It had been expected that the teachers in the groups using both the manual and communique would be aware of more activities and perhaps utilize more of these in their classrooms. The data of the two tables, however, are interpreted as indicating inconsistency and departure from the expected results. Various reasons may be suggested for the inconsistencies noted in this part of the study: (1) the POS did not measure what it was designed

to measure and therefore was not valid to this study; (2) use of three categories was not necessary, one category may have been sufficient; (3) observers needed more training in observation techniques; and (4) in fact, inconsistent use of materials by the teachers. It may be that the extent of use of teaching aids in the classroom cannot be effectively as efficiently measured. It would appear that further study of this technique is warranted before definite conclusions can be drawn.

TABLE 3-5

SUMMARY OF PATTERNS OBSERVATION SUMMARY FOR PATTERNS TELELESSON 30

Observation Categories	Pre-Lesson 30			Post Lesson 30		
	N = 6 Communique	N = 4 Manual	N = 3 Communique and Manual	N = 6 Communique	N = 3 Manual	N = 4 Communique and Manual
	f %	f %	f %	f %	f %	f %
Teacher Gives	8 1.8%	40 13.2%	21 9.2%	13 2.8%	28 12.3%	25 8.2%
Teacher Asks	9 1.5%	9 3.0%	21 9.2%	6 1.3%	27 11.8%	41 13.5%
Pupil Responds	33 7.2%	21 6.9%	13 5.7%	51 11.2%	54 23.7%	49 16.1%
Materials Check List	9 30.0%	9 45.0%	4 26.6%	2 6.7%	3 20.0%	4 20.0%

TABLE 3-6

SUMMARY OF PATTERNS OBSERVATION SUMMARY FOR PATTERNS TELELESSON 31

Observation Categories	Pre-Lesson 31 N = 6 Communique		Pre-Lesson 31 N = 5 Manual		Pre-Lesson 31 N = 4 Communique and Manual		Post-Lesson 31 N = 6 Communique		Post-Lesson 31 N = 5 Manual		Post-Lesson 31 N = 3 Communique and Manual	
	f	%	f	%	f	%	f	%	f	%	f	%
Teacher Gives	4	0.9%	15	4.0%	2	0.7%	4	0.9%	15	4.0%	22	9.7%
Teacher Asks	16	3.5%	6	16.0%	5	1.6%	17	3.7%	28	7.4%	9	4.0%
Pupil Responds	43	9.4%	67	17.6%	30	9.9%	35	7.7%	26	6.9%	15	6.3%
Materials Check List	0	0.0%	1	4.0%	3	15.0%	3	10.0%	1	4.0%	4	26.6%

Student Achievement

The results of the administration of the student achievement test are contained in Table 3-7. The table presents the frequency distributions and descriptive statistics for the student achievement test for Patterns for each of the four teacher groups. The mean scores for the manual and communique groups were 11.71 and 11.83, respectively, with standard deviations of 2.64 and 2.69. The range of scores for the two groups was from 3 to 18 (the maximum) for the Manual group, while the Communique group ranged from 4 to 18. In sharp comparison the Communique and Manual group and the Control group mean scores were 8.65 and 8.63, respectively, with standard deviations of 2.55 and 2.56. The score ranges were from 3 to 15. The KR-20 of the test for each of the four groups ranged from .48 for the Control and Communique and Manual groups to .57 for the Communique only group. The reliability of the test is sufficient to measure group differences.

The students in the Manual group and Communique group achieved approximately as would be expected when compared to the Control group. It would be expected that students in the Communique and Manual group would achieve significantly better than students in any one of the other three groups. However, students in this group achieved only an average of .02 of a point higher than students in the Control group and some 3.1 points lower than either of the other two experimental groups. After testing it was learned that students in the Manual only and Communique only groups were above average students and were matched approximately on the bases of achievement and intelligence. The students in the Control

TABLE 3-7

FREQUENCY DISTRIBUTION AND DESCRIPTIVE STATISTICS FOR PATTERNS
STUDENT ACHIEVEMENT TEST DATA

Score	Manual	Communique	Communique and Manual	Control
18[1]	2	3	0	0
17	4	10	0	0
16	3	9	0	0
15	16	10	1	0
14	21	26	2	1
13	20	32	3	7
12	26	29	9	12
11	22	33	8	10
10	19	21	18	18
9	11	17	18	16
8	10	10	21	22
7	4	3	9	9
6	3	2	4	15
5	2	1	8	7
4	0	2	4	4
3	1	0	4	2
2	0	0	0	1
11	0	0	0	0
N	164	218	109	124
$\bar{X}$	11.71	11.83	8.65	8.63
S	2.64	2.69	2.55	2.56
KR 20	.55	.57	.48	.48

[1]Maximum Score = 18

and Communique and Manual groups were heterogenous in nature. Further the students in the first two groups had had considerable exposure to the material covered in lessons 30 and 31 prior to viewing the material on television. No explanation can be advanced for the lack of difference in mean test scores between the Control and Manual and Communique groups.

An analysis of variance was performed to determine if there were any significant differences in achievement levels between the four groups. A summary of this analysis of variance found in Table 3-8. A significant F of 70.63 was obtained, indicating that there was a difference between the groups.

Table 3-8

Summary of Analysis of Variance of Patterns Student Achievement Test Data

Source of Variation	Sum of Sqs.	d.f.	Mean Sq.	F
Between Treatments	1491.69	3	497.23	70.63**
Error	4301.44	611	7.04	
Totals	5793.13	614		

** Significant at the .01 level.

In order to identify where the significant differences were, Duncan's New Multiple Range Test (Kramer, 1956) was applied to the differences between means. There were significant differences between the Communique only and Communique and Manual and Control groups and between the Manual only and Communique and Manual and Control groups. There were no significant differences between the Communique only and Manual only or Communique and Manual and Control groups. A summary of these results is presented in Table 3-9.

Table 3-9

Duncan's New Multiple Range Test Applied to Differences Between Treatment Means of Table 3-8 for Student Patterns Achievement Test Data *

Communique	Manual	Communique and Manual	Control
11.8	11.71	8.65	8.63

*Any two treatment means not underscored by the same line are significantly different. Any two treatment means underscored by the same line are not significantly different.

CONCLUSIONS

The following conclusions are based on the results of the study.

1) The efficiency and effectiveness of the Communique and Manual Evaluation forms has again been demonstrated

2) Experienced teachers can be trained to specify instructional objectives on the basis of manual and video tape materials

3) A classroom observation summary and student achievement test can be developed from teacher specified behavioral objectives relating to ITV telelessons.

4) Relatively unsophisticated individuals are able to apply a classroom observation summary

5) A great deal of pre or post telelesson teacher activity was not observed in conjunction with the two Patterns lessons included in the study

6) Student learning is influenced by teacher use of teacher aids with greatest student learning being associated with use of communique or manual material.

7) It appears that manual materials are of greater value to teachers it they have some general

introduction to the material such as
that provided by the communiques

8) It is easier to train experienced leaders
to specify behavioral objectives for a
more structured subject matter or mathematics,
than in the area of elementary social studies.

Chapter 4

SUMMARY OF PUBLIC BROADCASTING SURVEY

The present chapter will contain a description of a study undertaken to examine the feasibility of a mailed questionnaire survey of public broadcast viewing in the state of Georgia (See Appendix A for a definition of Public Broadcasting). This survey technique was undertaken partially on the basis of the success of the same procedure when applied on a national basis (Siegle, 1969).

METHODOLOGY

The methodology of the present survey was primarily concerned with two phases; instrument development and sampling of ETV viewers and non-viewers.

Instrument Development

A two-page (single sheet), small print, 22 item questionnaire was developed. Format and questions were similar to those in the NET-McGraw Hill national survey instrument (Siegle, 1969). A copy of the instrument can be found in Appendix S. The first fifteen questions dealt with general demographic data, and surveyed household viewing habits and reasons for watching TV. Question 16 allowed determination of ETV vs non-ETV viewer groups. These groups were to form the basic units in the subsequent data analysis to be reported later in this chapter. The remaining questions related to the viewing habits of the ETV watcher, favorite programs, reasons for watching, and sources of information about local ETV stations.

Sampling

A general invitation letter was included with a stamped addressed return envelope in the survey packet (See Appendix T). Initially the intent was to

survey the one major population center located nearest each of the 10 broadcast centers. Due to the fact that surveys were currently underway in the Atlanta and Athens areas, they were eliminated from the sampling list. The results of these two survey's can be found in a University of Georgia, School of Journalism masters thesis by Thorp (1970). The sampling procedure involved the selection of approximately every two hundredth name (excluding businesses) from eight area Southern Bell telephone directories. The resulting number of recipients was as follows:

City	No. Questionnaires sent	Relevant Channel
Albany	125	WABW - 14
Augusta	317	WCES - 20
Columbus	368	WGSP - 28
Macon	259	WDCO - 15
Rome	157	WCLP - 18
Savannah	349	WVAN - 9
Valdosta	69	WXGA - 8
Waycross	51	WXGA - 8

This procedure resulted in the mailing of 1695 questionnaires.

RESULTS

Unfortunately the large expected questionnaire return did not materialize. A very low rate of return, approximately 20%, yielded 319 usable questionnaires. Many factors could have accounted for this small return. The mailings were made (because of time pressure) about the time income tax returns were due and the national census was being conducted. There was also a relatively high level of political and civil rights tension present in the state. The survey form may have been perceived as too long and not perceived as attractive or important by potential respondents. The ETV audience is known to be small,

and since the focus of the survey was on ETV, non-ETV viewers were probably less disposed to respond. The respondents must be considered as being a biased sample. Conclusions and generalizations must be made with great caution.

Differences Between ETV viewers and Non-viewers

Of the 319 useful questionnaire respondents, 96 or 31% said that they were viewers of Public Broadcasting. This figure compares favorably with the results of similar surveys.

An initial set of tables will now be presented and discussed which relate to selected demographic variables. A subsequent set will deal with characteristics peculiar to the ETV viewer.

Data describing the distribution of ages of head of household are presented in Table 4-1. Inspection of the data reveal an average age of 45,

TABLE 4-1

Distribution of Ages of Heads of Household in ETV Viewer Survey

	ETV Viewer		ETV Non-Viewer	
	f	%	f	%
Age Category				
-25	3	3	17	17
25 - 34	24	25	45	19
35 - 49	30	31	78	33
50 - 64	29	30	57	24
65+	10	10	35	15
	$\overline{X}$ = 45.39		$\overline{X}$ = 45.38	

which corresponds to census data, and no appreciable differences between the two different viewing groups.

When biographical data are examined with regard to educational level it is noted that the estimated mean educational level of the ETV viewer is some-

TABLE 4-2

Educational Level of Head of Household in ETV Viewer Survey

	ETV Viewer		ETV Non-Viewer	
	f	%	f	%
Level				
Grammar School	5	5	22	9
Some High School	10	10	29	12
High School Graduate	25	25	71	30
Some College	24	25	49	21
College Graduate	10	10	36	15
College Graduate +	21	22	23	10
No Response	2	2	3	1
	$\overline{X}$ = 13.62		$\overline{X}$ = 12.91	

Note: Means represent estimated years of schooling.

what higher, approximately one year, than that of non-viewers. Viewers tend to fall into the category of having had some college. Non-viewers also fall within this broad category, but at a lower level.

The data of table 4-3 also support a previously observed general trend in ETV viewer surveys. This trend, higher proportion of employment in professional and managerial positions, although distinct, is not quite as strong as in other studies.

TABLE 4-3

Occupation of Head of Household in ETV Viewer Survey

	ETV Viewer		ETV Non-Viewer	
	f	%	f	%
Occupation				
Manual or Unskilled	0	0	9	4
Service Industries	0	0	2	1
Protective Worker	2	2	5	2
Skilled Worker	12	12	41	18
Foreman or Supervisor	6	6	16	7
Clerical	10	10	20	9
Owner or Manager	20	21	44	19
Professional	25	26	34	15
Retired	11	11	26	11
Other	10	10	31	13

No significant differences were observed between viewer and non-viewer in size of household. An analysis of the data of table 4-4 resulted in a mean number people per household of slightly more than three.

TABLE 4-4

Size of Household in ETV Viewer Survey

	ETV Viewer		ETV Non-Viewer	
	f	%	f	%
Persons				
1	8	8	18	8
2	29	30	73	31
3	16	17	43	18
4	28	29	54	23
5	8	8	23	10
6	5	5	11	5
7	2	2	3	1
8	0	0	3	1
9	0	0	2	1
No Response & Blank	0	0	3	1
	$\overline{X}$ = 3.22		$\overline{X}$ = 3.27	
	SD = 1.41		SD = 1.57	

When the membership of the household is examined in terms of age categories, it was observed that the highest frequency of children for both viewer and non-viewer is in the category 6-12. The next most frequently represented categories in order are the under 6, 13-16, and 17-20 categories. No differences of consequence were noted between the two groups. An interpretation of the trend of the data in Table 4-5 is toward the conclusion that although the two groups have about the same number of people per household, the non-viewers tend to be an older group, at least up to the age of 20.

TABLE 4-5

Distribution of Ages of Household Members in ETV Viewer Survey

		ETV Viewer		ETV Non-Viewer	
		f	%	f	%
Age Group	No. In Group				
Under 6	1	15	16	37	16
	2	5	5	15	6
	3	0	0	3	1
	4	0	0	1	0
	No Response & Blank	76	79	177	76
		$\overline{X}$ = 1.25		$\overline{X}$ = 1.42	
6 - 12	1	15	16	37	16
	2	6	6	21	9
	3	5	5	3	1
	4	1	1	3	1
	No Response & Blank	69	72	169	73
		$\overline{X}$ = 1.70		$\overline{X}$ = 1.56	
13 - 16	1	15	16	38	16
	2	4	4	15	6
	3	0	0	3	1
	No Response & Blank	75	78	177	76
		$\overline{X}$ = 1.04		$\overline{X}$ = 1.37	
17 - 20	1	20	21	26	11
	2	1	1	9	4
	3	0	0	1	0
	4	0	0	2	1
	No Response & Blank	75	78	195	84
		$\overline{X}$ = 1.05		$\overline{X}$ = 1.45	

Note: Means represent average numbers of people per age category

With 70% of the members of the viewers household being above age 20, and 88% of the non-viewers members being above age 20, the discrepancy between the groups becomes more apparent.

An analysis of the descriptions of their residences indicated that most ETV viewers and non-viewers either owned or rented their homes. Relevant data are presented in Table 4-6

TABLE 4-6

Characteristic Residence Facility in ETV Viewer Survey

	ETV Viewer		ETV Non-Viewer	
	f	%	f	%
Type of Residence				
House Owned	72	75	172	74
House Rented	10	10	24	10
Apartment Owned	2	2	0	0
Apartment Rented	6	6	27	12
Mobile Home Owned	6	6	5	2
Mobile Home Rented	0	0	1	0
No Response	0	0	4	2

No real differences were apparent with perhaps one exception. A greater proportion of non-viewers tend to be apartment renters. A possible explanation of this difference may be that apartment dwellers occasionally do not have access to outdoor television antennas. The use of an adequate and sensitive antenna is often necessary for adequate reception of the educational channel signal in many areas.

In addition to nature of occupation, another index of socio-economic level is the number of cars per household. It was found that with regard to this variable 70% of the viewers had two or more cars, but only 56% of the non-viewers had two or more. The mean number of cars per household was 1.84 for viewers and 1.67 for non ETV viewers. Fewer viewer households (1%) had no cars, than non-viewers (5%).

Similar differences in favor of the viewer were noted in average number of daily newspapers received or purchased (1.17 vs. .96) and monthly magazines (3.31 vs. 1.67). It might be inferred that the ETV viewer feels a need to read and expand his knowledge from as many sources as possible, with newspapers and magazines, in addition to television providing base for this expansion.

The distribution of television sets across households also showed differences favoring the ETV viewers. Their households averaged 1.30 black and white and .63 color sets, while the non-viewer averages 1.03 and .57 for black and white, and color respectively. Thirty-two percent of the viewers had two or more black and white sets versus 20% for the non-viewer household. Fifty-seven percent of the viewers had at least one color set; whereas, only 48% of the non-viewers had at least one color set.

The ETV viewer household in general tends to watch a greater total amount of television, particularly in the upper age brackets. (Grand mean Viewer 3.57 hours vs. 3.16 for Non-Viewer). This trend in the average number of hours spent watching television (ETV and commercial) is seen in the data of Table 4-7. The greatest difference between the groups, however, occurs in

TABLE 4-7

Frequency of All Television Average Daily Viewing
By Members of Household in ETV Viewer Survey

	ETV Viewer		ETV Non-Viewer	
	f	%	f	%
Hours per Day				
Children under 6				
1	3	3	5	3
2	4	4	15	16
3	5	5	12	13
4	1	1	9	10
5	0	0	1	0
6	0	0	1	0
7	0	0	1	0
8	2	2	1	0
9	0	0	0	0
10	0	0	1	0
11	0	0	0	0
12	0	0	1	0
No Response & Blank	81	84	187	80
	$\overline{X}$ = 3.07		$\overline{X}$ = 3.30	
Children 6 - 12				
1	2	2	8	6
2	5	5	22	16
3	8	8	16	12
4	8	8	10	7
5	4	4	5	3
6	1	1	3	2
10	0	0	2	0
No Response & Blank	68	71	167	72
	$\overline{X}$ = 3.36		$\overline{X}$ = 3.08	

TABLE 4-7 Cont'd

Frequency of All Television Average Daily Viewing by Members of Household in LTV Viewer Survey

	LTV Viewer		LTV Non-Viewer	
	f	%	f	%
Hours per Day				
Woman of the House				
1	13	14	30	13
2	14	15	45	19
3	15	16	35	15
4	17	18	49	21
5	12	12	19	8
6	4	4	20	9
7	4	4	3	1
8	1	1	3	1
10	4	4	6	2
12	2	2	2	1
13	1	0	1	0
16	1	0	0	0
No Response & Blank	8	8	20	8
	$\bar{X}$ = 4.17		$\bar{X}$ = 3.37	
Man of the House				
1	13	14	37	16
2	21	22	54	23
3	17	18	41	18
4	12	12	24	10
5	9	9	13	6
6	4	4	5	2
7	1	1	1	0
8	2	2	2	1
12	0	0	1	0
No Response & Blank	17	17	55	24
	$\bar{X}$ = 3.11		$\bar{X}$ = 2.78	

TABLE 4-7 Cont'd

Frequency of All Television Average Daily Viewing by Members of Household in ETV Viewer Survey

	ETV Viewer		ETV Non-Viewer	
	f	%	f	%
Hours per Day				
Teenagers 13-16				
1	1	1	6	3
2	4	4	14	6
3	5	5	10	5
4	6	6	8	3
5	0	0	5	2
6	1	1	3	1
9	1	1	0	0
12	0	0	1	0
13	0	0	1	0
No Response & Blank	78	81	185	80
	$\overline{X}$ = 3.50		$\overline{X}$ = 3.42	
Young Adults 17-20				
1	3	3	6	3
2	3	3	10	4
3	2	2	5	2
4	2	2	2	1
5	1	1	2	1
6	2	2	1	0
7	1	1	2	1
8	1	1	0	0
No Response & Blank	81	84	205	88
	$\overline{X}$ = 3.67		$\overline{X}$ = 2.82	

TABLE 4-7 Cont'd

Frequency of All Television Viewing by Members of Household in ETV Viewer Survey

	ETV Viewer		ETV Non-Viewer	
	f	%	f	%
Hours per Day				
Other Adults				
1	4	4	1	0
2	0	0	7	3
3	2	2	3	1
4	1	1	3	1
5	0	0	2	1
6	0	0	4	2
7	1	1	1	0
8	1	1	2	1
No Response & Blank	87	91	210	90
	$\bar{X}$ = 3.22		$\bar{X}$ = 4.04	

the "Other Adult" category and in fact favors the non-viewer household. Note that the averages are for individuals in those age categories, and do not reflect the total number of people responding but only those in the categories.

A variety of reasons for watching television were noted (See Table 4-8). Both ETV viewers and non-viewers selected "Relaxation" as being most descriptive of their motivation for watching television. Also high on the list were "Educational Reasons".

TABLE 4-8

Summary of Reasons for Watching Television in ETV Viewer Survey

	ETV Viewer		ETV Non Viewer	
	f	%	f	%
Reason				
For Art and Music	8	8	7	3
Educational Reasons	21	22	38	16
Relaxation	39	41	84	36
Gives Ideas of How Others Live	3	3	12	5
Offers Company	11	11	27	12
Other	13	14	59	25
No Response	1	1	6	3

When asked about the most commonly used method to select programs for viewir-, respondents indicated that the two most common methods were by referral to TV Guide and the local newspaper announcements. There were no significant differences between ETV viewers and non-viewers in method of program selection. The third most frequently used method was "dial switching.

TABLE 4-9

Method of Program Selection in ETV Non-Viewer Survey

	ETV Viewer		ETV Non-Viewer	
	f	%	f	%
Method				
Select one channel only	0	0	10	4
Turn the dial	15	16	25	11
View same programs weekly	2	2	21	9
Family decision	5	5	12	5
Station Announcements	2	2	5	2
TV Guide	31	32	63	27
WGTV Program Guide	4	4	1	0
Newspaper	34	35	88	38
Other	2	2	4	2
No Response	1	1	4	2

The most commonly checked reason for not watching ETV was poor reception (41%), followed by a claim of never having heard of the ETV channel in their particular area (28%). Only three percent of the non-viewer respondents indicated that they did not like the ETV programs.

Characteristics and Preferences of ETV Viewers

The reader must again be cautioned at this point to be careful of the conclusions drawn in this survey due to small sampling of people. This is particularly true when considering the data of Table 4-10 as only a total of 96 people are represented.

TABLE 4-10

Frequency of Educational Television Public Broadcast Viewing by Age Categories of Household

AGES 6 AND UNDER

No. In Group	f	%
1	4	4
2	4	4
3	1	1
5	2	2
6	1	1
8	1	1
10	1	1
No Response	82	85

$\overline{X} = 3.50$

AGES 6-12

1	8	8
2	4	4
3	3	3
4	1	1
5	3	3
6	1	1
7	2	2
8	1	1
10	1	1
No Response	72	75

$\overline{X} = 3.42$

AGES 13-16

1	2	2
2	4	4
3	1	1
4	1	1
5	1	1
6	1	1
No Response	86	90

$\overline{X} = 2.80$

TABLE 4-10 Cont'd

Frequency of [illegible]ucational Television Public Broadcast Viewing by Age Categories of Households

AGES 17 - 20

No. In Group	f	%
1	5	5
2	4	4
4	1	1
No Response	86	90

$\overline{X}$ = 1.70

WOMAN OF THE HOUSE

1	27	28
2	14	15
3	11	11
4	4	4
5	3	3
6	1	1
8	2	2
No Response & Blank	34	35

$\overline{X}$ = 2.27

MAN OF THE HOUSE

1	23	24
2	12	12
3	3	3
4	5	5
5	1	1
6	2	2
No Response & Blank	49	51

$\overline{X}$ = 1.98

OTHER ADULTS

1	1	1
2	1	1
3	2	2
4	1	1
8	1	1
No Response & Blank	90	94

$\overline{X}$ = 3.50

The small number of people in each age category make any conclusions risky. It appears, however, that on the average the greatest amount of ETV viewing is engaged in by members of the under six and other adult age groups. This, in part, can probably be attributed to Sesame Street. Members of the age group 6-12, were the next most frequent ETV consumer. The woman of the house tended to watch slightly more than the man of the house. The apparent differences between Tables 4-7 and 4-10 can, to some degree, be attributed to some lack of reliability in the survey instrument and methodology, but also reflect differences in commercial vs. ETV viewing. In comparing the averages, it is seen that the greater portion of all television viewing is of ETV (Grand mean Table 4-7 = 3.22, of Table 4-10 = 2.46). It should again be noted that the averages in each category are somewhat misleading as they are means for those who were in the category, not averages as a function of the total group.

The results of a modest popularity poll are summarized in Table 4-11. Looking at the combined f-% columns it can be seen that the four most frequently watched programs are NET Playhouse, Sesame Street, Firing Line, and the French Chef. The remainder of the programs are pretty well divided in terms of their popularity.

TABLE 4-11

Frequencies of Viewing Selected ETV Programs

Program	VIEWING CATEGORY: Regularly f	Regularly %	Irregularly f	Irregularly %	Combined f	Combined %
Georgialand	2	2	22	23	24	25
Sesame Street	14	15	19	20	33	35
University News	6	6	11	11	17	17
Bridge with Jean Cox	0	0	5	5	5	5
Shavin's Column	1	1	2	2	3	3
South of Youth	2	2	15	16	17	18
Coach Lawson	0	0	9	9	9	9
Black Journal	3	3	5	5	8	8
NET Playhouse	5	5	31	32	36	37
Firing Line	9	9	24	25	33	34
TV High School	8	8	5	5	13	13
NET Journal	3	3	18	19	21	22
French Chef	3	3	27	28	30	31
Forsyth Saga	4	4	9	9	13	13
Mr. Rogers	8	8	10	10	18	18
Advocates	1	1	6	6	7	7
Aunt Lollipop	4	4	5	5	9	9
Law Enforcement	4	4	6	6	10	10
Why You Smoke	0	0	7	7	7	7
Men and Ideas	2	2	9	9	11	11
High and Wild	4	4	9	9	13	13
American West	7	7	14	15	21	22
Screen Classics	2	2	19	20	21	22
Government Story	5	5	15	16	20	21

It is interesting to note that the top four programs are network shows, although several "local" programs did fairly well (Georgialand, University News).

The Project staff was interested in identifying where information about the local ETV Programs came from. The answers to this question are presented in Table 4-12.

TABLE 4-12

Source of Information About Local ETV Channel

Source	Frequency	Percent
Accidentally Found On Set	24	25
TV Announcement	7	7
Word of Mouth	15	16
Read About It	36	37
Other	10	10
No Response	4	4

It is interesting that after "reading about it", accidentally finding the station on the set was the most frequent way of learning about local ETV programming.

An interesting contrast is found in the data relating to reasons for watching television in general (Table 4-8) and ETV in particular (Table 4-13). The educational reasons for watching television take on much more importance when we focus the respondents attention on ETV, and relaxation takes on less importance.

Summary of Reasons for Watching Educational Television

Reasons	Frequency	Percent
for Art & Music	14	15
Educational Reasons	51	53
Relaxation	3	3
Gives Ideas of How Others Live		4
Topics of Conversation		1
Other		20
No Response		4

CONCEPTUAL PROFILE OF THE ETV VIEWER

Despite the shortcomings of data based on the somewhat unreliable methodology of the present survey, which was subject to a small questionnaire return, an ETV viewer profile is offered. Only the most striking characteristics will be mentioned. The ETV viewer tends to be:

> The 45 year old head of a three person household with some college training. The non-adult members of the ETV viewers household are likely to be in the 6-12 age group. The head of the ETV viewing household is likely to hold a professional or managerial position, own his own house, two cars and a black and white and a color TV set, and read several daily newspapers and monthly magazines. He and the members of his family are likely to catch an average of almost four hours of television a day, the greater portion of which is educational television. He watches television because it provides relaxation and also for educational reasons. His favorite programs tend to be public affairs, cultural or related to a personal interest.

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APPENDIX A

GLOSSARY OF TERMS

Behavioral Objective: a statement about a specific expected learning outcome which includes information about the nature of the subject matter, the conditions under which the behavior is to be observed, and the criteria of accepted competency.

Closed Circuit Television (CCTV): A system of direct broadcast from camera to receiver, by-passing open-air transmission and reproduction, and usually carried by cable.

Communique: A half-hour service, after school, broadcast service for teachers featuring the series television teacher previewing future lessons. Generally two to five lessons are previewed. Broadcasts emphasize lesson content, teacher presentation methods, discussion topics, and suggested post-program activities.

Educational Television (ETV): This term has come to cover two relatively distinct communication functions: (1) instructional television-directed at students in the classroom or otherwise in the general context of formal education, and (2) public broadcasting which is directed at the general community.

Field Test: A technique used in evaluation in which procedures and methodologies are tried out in a setting and with subjects as closely approximating the target group and setting as possible. As contrasted to the pilot test, field testing is (a) less laboratory like, (b) more comprehensive, and (c) more complex. In the case of the present project examples of field testing would be the try out of the questionnaires used to survey teachers about their ITV attudes and practices, and student attitudes toward ITV.

In-Service Program: Usually a non-credit series aimed at improving teacher knowledge and skill in her area of competency. Weekly broadcasts typically cover subject matter areas of reading, English, and oral and written compositions.

Instructional Television (ITV): The in-school educational broadcasting generally week days from 8:30 a.m. to 3:00 p.m. covering subject matter contemporary with school curricula. Series in the form of articulated programs (usually 33) run from 15 to 30 minutes. Major portion of programming is aimed at elementary school.

Manual: Publication produced by CETV and available upon request by teachers covering full years programs for a specific series. Manuals contain lesson objectives, pre- and post-program suggested activities for students, and reference reading for students and teachers, materials and vocabulary lists, and overview of program content. Programs are cross-referenced to state approved textbooks.

Model: A scaled paradigm representing the total operation of a particular larger system under investigation. In the present study, the model refers to a paradigm describing methods and activities useful in continuous evaluation of the Georgia Educational Television Network.

Patterns Teleseries: (See Series)

Pilot Test: A procedure used in evaluation to establish feasibility of using specific method or instrument with a small group in a highly controlled situation. Comes before field testing and usually has more limited objective.

Program: Generally refers to that 15 to 30 minute broadcast, usually once a week, covering relatively limited number of instructional objectives.

Public Broadcasting: Programming is basically made up of cultural, children's, public affairs and other single purpose telecasts. Programs may be broadcast on continuing or one short basis from about 4:00 p.m. to sign-off around 10:30 to 11:00 p.m.

Series: The complete collection of articulated instructional programs (generally 33 to a series) in a particular subject area aired during the course of an academic year in a sequented fashion. Series parallel most academic discipline currently used in the classroom.

Two series came under intense scrutiny in the present project. These were a second grade social studies series Wonderful You and a sixth grade math series Patterns.[1]

Wonderful You - Grade 2

The major objective of this social studies program is to guide the child toward a better understanding of what is human about man and how he can become more so. Five forces which shape man's humanity suggested by Bruner are touched on. Namely, tools, education, language, man's urge to explain and to interpret his world, and social organization. Concepts, attitudes, and skills are considered. The interdependence of man will be stressed. Specifically evaluative research efforts involved Lesson 32 "Planning More Human Communities," and Lesson 33 "Let's Build for Tomorrow Today".

Patterns - Grade 6

This "discovery" oriented approach to basic mathematics encourages student creativity and classroom participation. It is designed to help the student develop logical thinking patterns progressing from observing, guessing, and generalization to predicting mathematical events. Specifically the following lessons were evaluated: Lesson 30 - Volume I, and Lesson 31 - Volume II.

Teacher Aid: (See Manual)

Telelesson: (See Program)

Utilization: As used here utilization means effective integration of ITV programs into curriculum. Unfortunately little qualitative data were gathered during the initial stages of evaluation and the staff had to reply primarily upon frequency of reported use as an index of utilization.

Wonderful You Teleseries: (See Series)

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[1]A list of student and teacher objectives for both these series can be found in Appendices K, M, O, and Q.

APPENDIX B

INSTRUCTIONAL TELEVISION QUESTIONNAIRE - TEACHER FORM

Directions: Please rate each statement by selecting an appropriate number. Mark your choice on the special answer sheet with a soft lead pencil if at all possible. If a particular statement does not apply to you or your situation, or you honestly feel you cannot make a judgment about it, leave the space for that item blank. If you wish to change a rating be sure to erase completely before making a new mark. Note that the answer sheet is set up so that you make ratings to questions numbered sequentially across the page from left to right.

In the first seventeen questions on this opinionnaire we are asking you to make some evaluative judgments about various aspects of instructional television. Again note that if a question does not apply to you or your situation leave the answer space blank.

Rate: 1 = poor 2 = fair 3 = average 4 = above average 5 = excellent

Relationship of Instructional Television to Students

1. Relevance of subject matter covered in instructional television lessons to the needs of your students.

2. The outside projects that your students have developed as a direct result of an instructional television program or series.

3. Outlook that your students have each week for the lessons they see on television.

Relationship of Instructional Television to School Administrators

4. Support that your local school superintendent gives to the use of instructional television in your school system.

5. Support that your local curriculum director or coordinator gives to the use of instructional television in your school system.

6. Support that your principal gives to the use of instructional television in your school.

Supplementary Materials

7. Quality of the supplementary materials available for use before and after instructional television programs.

8. Quantity of the supplementary materials available for use before and after instructional television programs.

Rate: 1 = poor
2 = fair
3 = average
4 = above average
5 = excellent

Utilization of Instructional Television

9. The advice and assistance that your curriculum director or supervisor is able to give on the utilization of instructional television.

10. The value of workshops or meetings conducted by the Georgia Educational Television Network Utilization staff. (Omit this question if you have not attended a meeting within the last twelve months.)

11. Training you had as an undergraduate in college on the use of instructional television. (If you had none, omit this question.)

Instruction and Scheduling of Instructional Telvision

12. Format of instructional television programs.

13. Personality of the television teachers.

14. Length of the instructional television programs that you use with your classes.

15. Relationship of your scheduled classroom activities with instructional television programs.

16. Influence that your experience with instructional television has had on your pursuing additional academic work.

17. Overall worth of instructional television in the school curriculum.

We now ask you to shift your thinking to more quantitative questions. Questions 18 through 55 deal with aspects of instructional television which require judgments of frequency. A new set of four rating numbers is used. The numbers and their interpretations are as follows:

Rate: 1 = never
2 = sometimes
3 = usually
4 = always

Relationship of Instructional Television to Students

18. Do your students keep a television notebook?

19. Do your classroom tests include items directly related to what your students learned from instructional television?

20. Do you prepare your students for an instructional television program?

21. Degree to which you feel it is practical for you to prepare your students for a particular instructional television program?

Rate: 1 = never 3 = usually
2 = sometimes 4 = always

22. How often do you conduct follow-up activities with your students, after they have viewed an instructional television program?

23. Extent to which you feel that the content of instructional television programs, recommended for your students, is at the appropriate grade level?

24. Do you feel that the presentation of instructional television programs, recommended for your students, is at the appropriate grade level?

25. Do you think that your students enjoy watching instructional television?

Relationship of Instructional Television to School Administrators

26. Does your principal cooperate with you and your fellow teachers in adjusting the overall schedule of the school in order to view instructional television.

Instruction and Scheduling of Instructional Television

27. Extent to which you find it difficult to organize your classroom activities around the instructional television schedules?

28. Would you like to be able to repeat having your class view a particular instructional television program at a later time after its initial showing?

29. Does the present schedule for instructional television interfere with the organization of your instructional program?

30. Do you cooperate with your fellow teachers in adjusting class meetings in order to view instructional television programs?

31. Is the decision to use a particular instructional television series made by you?

32. Is the decision to use a particular instructional television series made by your department head?

33. Is the decision to use a particular instructional television series made by your principal?

34. Is the decision to use a particular instructional television series made by a group of you and your fellow teachers?

35. Extent to which you feel that the programs on instructional television are up-to-date in terms of the validity of their content?

36. Extent to which you as a teacher, feel that you learn subject matter content as a result of watching instructional television?

Rate: 1 = never 3 = usually
2 = sometimes 4 = always

37. Extent to which you feel that you learn teaching techniques from watching the television instructor?

38. Extent to which you tend to organize your classroom activities around an instructional television lesson or lessons?

39. Extent to which you feel that the use of instructional television tends to lend structure to your classroom lesson?

40. Extent to which you feel that the use of instructional television causes you to plan your lessons more closely?

41. Extent to which you think that the instructional television presentations are appropriate for the grade level for which they are designed?

In order for us to make as much sense as possible out of the data, our research staff would like to obtain some information about the questionnaire respondents.

Personal Data and Use of Instructional Television

42. If you did not use instructional television last year, but are using it this year, why?

1) set not available last year but available this year.
2) first year of teaching school.
3) felt that shows last year were not appropriate for group I taught.
4) could not schedule shows.
5) unaware of how to use instructional television.

43. If you used instructional television last year but you are not using it this year, why?

1) set not available.
2) cannot schedule appropriate programs for class.
3) feel that it is a waste of time.
4) cannot integrate programs into the curriculum that I am teaching under.

44. Principle grade level that you teach.

1) K or 1
2) 2 or 3
3) 4 or 5
4) 6 or 7
5) 8 or above

45. Your sex.
    1) male
    2) female

46. Number of years that you have been teaching including this year.

    1) 1
    2) 4 to 3
    3) 4 to 6
    4) 7 to 10
    5) more than 10

47. Your present level of certification.

    1) T-4, B-4, or XB-4
    2) T-5, B-5
    3) TS-6
    4) Other

48. Highest college degree or certificate held. (Check only one.)

    1) Bachelor's
    2) Master's
    3) Specialist (6th year)
    4) Doctorate
    5) None

49. Your age.

    1) Under 25
    2) 26-35
    3) 36-45
    4) 46-55
    5) Over 55

50. Do you have a TV set in your classroom or access to a set?

    1) Yes
    2) No

51. Do you use it for Georgia In-School television series?

    1) Yes
    2) No

If you at present or have at some time used telecourses or telecourses and the communiques that accompany the series, please answer the following questions. If not return your answer sheet to the person designated by your principal. Many thanks!

52. How many series do you use?

    1) 1
    2) 2
    3) 3
    4) More than 3

53. How many ITV telelessons (including repeats) do you use during an average school week?

1) One
2) Two
3) Three
4) Four
5) Five or more

54. To what extent do you generally use a series?

1) on a weekly basis
2) in two or more lesson units
3) selected programs only

55. To what extent do you presently view the communique related to ETV series you use in your classroom?

1) Not at all
2) Occasionally
3) Most of the time
4) All the time

56. If you do not view the communique at present time, how long has it been since you used them?

1) Never used them
2) The first year I used the series only.
3) The first several years I used the series.

Questions 57 through 61 are in the form of statements. Please rate each statement according to the following scale:

1 = Poor	3 = Average	5 = Excellent
2 = Fair	4 = Good	

57. The extent to which the communique will aid you in your classroom teaching.

58. Organization of the communique.

59. Ability to incorporate teaching techniques suggested by the communiques.

60. Format of communiques.

61. Overall worth of the communiques.

For the following question just select the alternative that best expresses your feeling.

62. Please suggest, what you feel to be the most appropriate time for you to view the communiques.

1) Before school (in the A.M.)
2) During school hours.
3) At the time they are presently aired.
4) Evening hours (after 7:00 p.m.)
5) Saturday

APPENDIX C

SAMPLE TEACHER ITV SURVEY INVITATION LETTER

THE UNIVERSITY OF GEORGIA
COLLEGE OF EDUCATION
ATHENS, GEORGIA 30601

DEPARTMENT OF CURRICULUM
AND SUPERVISION

FOURTH FLOOR BALDWIN HALL
PHONE (404) 542-1343

Dear Colleague:

The University of Georgia in cooperation with the Georgia State Department of Education is developing a model for the evaluation of the Georgia State Educational Television Network. In order to help us design and develop this model, we would like your opinions and ideas about how instructional television is used in your school. Instructional television is broadcast Monday through Friday between the hours of 8:00 a.m. and 3:00 p.m. on one of ten television stations operated or leased by the Georgia State Department of Education. Attached you will find a brief questionnaire that has been developed for your own special group, that is, teachers, parents, supervisors, principals, children, etc. This data gathering device is the first of several that are being developed.

You will note that your answer sheet has been coded with an identification number. This is purely for accounting purposes. There is no way we can associate a code number with a particular teacher. All information will remain confidential and will be used for statistical purposes only.

Your cooperation in our project is greatly appreciated, and we value your sharing with us your real feelings and honest answers to all questions.

Sincerely,

David A. Payne, Ph.D.
ETV Evaluation Project Director

nfg

SAMPLE TEACHER ITV SURVEY INVITATION LETTER

THE UNIVERSITY OF GEORGIA
COLLEGE OF EDUCATION
ATHENS, GEORGIA 30601

DEPARTMENT OF CURRICULUM
AND SUPERVISION

FOURTH FLOOR BALDWIN HALL
PHONE (404) 542-1343

April 22, 1970

(Elementary School Principal)
Address
City, State Zip Code

Dear Mr. Principal:

The University of Georgia with the guidance and financial support of the State Education Department is beginning the development of an evaluation model which will eventually be used to judge the effectiveness of the Georgia Educational Television Network. Dr. Russell Clark and personnel from the State Education Department's Division of Research, Planning and Evaluation are assisting us in gathering information concerning student learning, teacher attitudes and the like. Such data should help GETV and our legislature make more rational decisions concerning classroom television.

This letter is to respectfully request your participation and that of your teachers in the beginning stages of this project. We have developed a set of questionnaires for various groups of educators. At this time teachers are of primary concern. Your school has been randomly chosen to be represented in our initial sampling. It would be very much appreciated if you would have your teachers take about an hour to complete a questionnaire dealing with various aspects of instructional television and, teacher and school characteristics. Copies of this questionnaire are being forwarded under separate cover. Ordinarily for a project like this we would have cleared authorization through your superintendent's office. Due to severe time limitations, however, we are contacting you directly. A copy of this letter is being forwarded to your local superintendent to alert him to our request. If there are questions concerning the project, please feel free to call me collect (area 404, Office: 542-1343; Home: 549-5394) or the Associate Project Director, Dr. Jerry Ayers, (area 404, Office: 542-4244; Home: 543-2675).

Let me express a heart felt "thank you" in advance. We will of course see to it that a copy of our final report is sent to you later this summer. For your convenience we are enclosing a self addressed stamped envelope for return of the answer sheets. Please return only the answer sheets and discard the teacher questionnaire.

Sincerely,

David A. Payne, Ph.D.
ETV Evaluation Project Director

cc: (Superintendent)
Dr. Jack P. Nix

APPENDIX D

Principal Form

EVALUATION OF INSTRUCTIONAL TELEVISION

The University of Georgia in cooperation with the Georgia State Department of Education is developing a model for the evaluation of the Georgia State Educational Television Network. In order to help us design and develop this model, we would like your opinion and ideas about how instructional television is used in your school. Instructional television is broadcast Monday through Friday between the hours of 8:00 a.m. and 3:00 p.m. on one of ten television stations operated or leased by the Georgia State Department of Education. Attached you will find a brief questionnaire that has been developed for your particular group, that is, principals, teachers, supervisors, parents, children, etc. This data gathering device is the first of several that are being developed. All information will remain confidential and will be used for statistical purposes only. We appreciate your sharing with us your real feelings and honest answers to all questions.

INSTRUCTIONAL TELEVISION QUESTIONNAIRE - PRINCIPAL FORM

Directions: Please rate each statement by selecting an appropriate number. Mark your choice on the special answer sheet with a soft lead pencil if at all possible. If a particular statement does not apply to you or your situation, or you honestly feel you cannot make a judgment about it, leave the space for that item blank. If you wish to change a rating be sure to erase completely before making a new mark. Note that all the answer sheet is set up so that you make ratings to question number sequentially across the page from left to right.

In the first twenty-one questions on this opinionnaire we are asking you to make some evaluative judgments about various aspects of instructional television. Again note that if a question does not apply to you or your situation, leave the answer space blank.

Rate: 1 = poor 2 = fair 3 = average 4 = above average 5 = excellent

Relationship of Instructional Television to Students

1. Relevance of subject matter covered in instructional television lessons to the needs of your students.

2. The outside projects that your students have developed as a direct result of an instructional television program or series.

3. Outlook that your students have each week for the lessons they see on television.

Relationship of Instructional Television to School Administrators

4. Support that your local school school superintendent gives to the use of instructional television in your school system.

5. Support that your local school board gives to the use of educational television in your school system.

6. Support that your local curriculum director or coordinator gives to the use of instructional television.

Supplementary Materials

7. Quality of the supplementary materials available for use before and after instructional television programs.

8. Quantity of the supplementary materials available for use before and after instructional television programs.

Rate: 1 = poor 3 = average 5 = excellent
2 = fair 4 = above average

Utilization of Instructional Television

9. The advice and assistance that your curriculum director or supervisor is able to give your teachers on the utilization of instructional television.

10. The value of workshops or meetings conducted by the Georgia Educational Television Network Utilization staff. (Omit this question if you or your teachers have not attended a meeting within the last twelve months.)

11. Training you had as an undergraduate in college on the use of instructional television. (If you had none, omit this question.)

Instruction and Scheduling of Instructional Television

12. Format of instructional television programs.

13. Personality of the television teachers.

14. Length of the instructional television programs that are used by your teachers.

15. Relationship of your school's scheduled activities with instructional television programs.

16. Overall worth of instructional television in the school curriculum.

Communique

17. Extent to which the teacher communiques aid your teachers in the classroom.

18. Organization of the communiques.

19. Format of the communiques.

20. Overall worth of the communiques.

21. Scheduled viewing times of the communiques.

We now ask you to shift your thinking to more quantitative questions. Questions 22 through 45 deal with aspects of instructional television which require judgments of frequency. A new set of four rating numbers is used. The numbers and their interpretations are as follows:

Rate:

1 = never	3 = usually
2 = sometimes	4 = always

Relationship of Instructional Television to Students

22. Do students in your school keep television notebooks?

23. Do your teacher's classroom tests include items directly related to what their students learned from instructional television?

24. Do your teachers prepare their students for an instructional television program?

25. Degree to which you feel it is practical for your teachers to prepare their students for a particular instructional television program?

26. How often do your teachers conduct follow-up activities with their students, after they have viewed an instructional television program?

27. Extent to which you feel that the content of instructional television programs recommended for your students is at the appropriate grade level?

28. Do you feel that the presentation of instructional television programs recommended for your students is at the appropriate grade level?

Instruction and Scheduling of Instructional Television

29. Do you feel that your teachers would like to be able to repeat having a class view a particular instructional television program at a later time after its initial showing?

30. Does the present schedule for instructional television interfere with the organization of your instructional program?

31. Do your teachers cooperate with one another in adjusting their class meetings in order that their students may view instructional television programs?

32. Is the decision to use a particular instructional television series in your school made by you?

33. Is the decision to use a particular instructional television series in your school made by each individual teacher?

34. Is the decision to use a particular instructional television series in your school made by your department heads?

35. Is the decision to use a particular instructional television series in your school made by your curriculum coordinator?

36. Extent to which you feel that the programs on instructional television are up-to-date in terms of validity of their content?

37. Extent to which you feel your teachers learn subject matter content as a result of watching instructional television?

38. Extent to which you feel your teachers learn teaching techniques from watching the television instructor?

39. Extent to which you feel that your teachers organize their classroom activities around instructional television lessons?

40. Extent to which you feel that the use of instructional television tends to lend structure to the classroom lesson in your school?

41. Extent to which you feel that the use of instructional television causes your teachers to plan their lessons more closely?

42. Extent to which you feel that the instructional television presentations are appropriate for the grade level for which they are designed?

Relationship of Instructional Television to Parents and PTA Groups

43. Do parents of your students ever discuss instructional television with you?

44. Does your PTA ever discuss the use of instructional television?

45. Does your PTA ever give financial aid toward the purchase of materials or equipment related to instruction via television?

In order for us to make as much sense as possible out of the data, our research staff would like to obtain some information about the questionnaire respondents. Would you take a last few minutes and answer the following questions.

46. Your sex.

1) male
2) female

47. Your age.

1) Under 25
2) 25-35
3) 36-45
4) 46-55
5) Over 55

48. Number of years you have been a principal, including this year.

1) 1
2) 2-5
3) 6-10
4) 11-15
5) more than 15

49. Highest college degree or certificate held. (Check only one.)

1) Bachelor's
2) Master's
3) Specialist (6th year)
4) Doctorate

50. Major teaching experience, while a classroom teacher.

1) elementary grades
2) junior high grades
3) senior high grades

51. Number of teachers in your school

1) less than 10
2) 11-15
3) 16-20
4) 21-25
5) more than 25

52. Number of television sets available in your school

1) 0
2) less than 3
3) 4-8
4) 9-15
5) more than 15

53. Is your school primarily considered an

1) elementary school
2) elementary-junior high school combination
3) elementary-junior high-senior high school combination
4) other

APPENDIX E

Curriculum Directors

Supervisors Form

EVALUATION OF INSTRUCTIONAL TELEVISION

The University of Georgia in cooperation with the Georgia State Department of Education is developing a model for the evaluation of the Georgia State Educational Television Network. In order to help us design and develop this model, we would like your opinion and ideas about how instructional television is used in your school system. Instructional television is broadcast Monday through Friday between the hours of 8:30 a.m. and 3:00 p.m. on one of ten television stations operated or leased by the Georgia State Department of Education. Attached you will find a brief questionnaire that has been developed for your particular group, that is supervisors, principals, teachers, parents, children, etc. This data gathering device is the first of several that are being developed. All information will remain confidential and will be used for statistical purposes only. We appreciate your sharing with us your feelings and honest answers to all questions.

INSTRUCTIONAL TELEVISION QUESTIONNAIRE - SUPERVISOR FORM

Directions: Please rate each statement by selecting an appropriate number. Mark your choice on the special answer sheet with a soft lead pencil if at all possible. If a particular statement does not apply to you or your situation, or you honestly feel you cannot make a judgment about it, leave the space for that item blank. If you wish to change a rating be sure to erase completely before making a new mark. Note how the answer sheet is set up so that you make ratings to questions number sequentially across the page from left to right.

In the first nineteen questions on this opinionnaire we are asking you to make some evaluative judgments about various aspects of instructional television. Again note that if a question does not apply to you or your situation leave the answer space blank.

Rate: 1 = poor 2 = fair 3 = average 4 = above average 5 = excellent

Relationship of Instructional Television to Students

1. Relevance of subject matter covered in instructional television lessons to the needs of your students.

2. Outlook that your students have each week for the lessons they see on television.

Relationship of Instructional Television to School Administrators

3. Support that your local school superintendent give to the use of instructional television in your school system.

4. Support that your local school board gives to the use of instructional television in your school system.

5. Support that your local principals give to the use of instructional television.

Supplementary Materials

6. Quality of the supplementary materials available for use before and after instructional television programs.

7. Quantity of the supplementary materials available for use before and after instructional television programs.

Utilization of Instructional Television

8. The value of workshops or meetings conducted by the Georgia Educational Television Network Utilization staff. (Omit this question if you or your teachers have not attended a meeting within the last twelve months.)

9. Training you had as an undergraduate in college on use of instructional television. (If you had none, omit this question.)

Rate: 1 = poor 3 = average 5 = excellent
2 = fair 4 = above average

Instruction and Scheduling of Instructional Television

10. Format of instructional television programs.

11. Personality of the television teachers.

12. Length of the instructional television programs.

13. Overall worth of instructional television in the school curriculum.

14. General relationship in your system of school's scheduled activities with instructional television programs.

Communiques

15. Extent to which the teacher communiques aid your teachers in the classroom.

16. Organization of the communiques.

17. Format of the communiques.

18. Overall worth of the communiques.

19. Scheduled viewing times of the communiques.

We now ask you to shift your thinking to more quantitative questions. Questions 20 through 39 deal with aspects of instructional television which require judgements of frequency. A new set of four rating numbers is used. The numbers for their interpretations are as follows:

Rate: 1 = never 3 = usually
2 = sometimes 4 = always

Relationship of Instructional Television to Students

20. Do students in your school system keep television notebooks?

21. Do your teachers prepare their students for an instructional television program?

22. Degree to which you feel it is practical for your teachers to prepare their students for a particular instructional television program?

23. How often do your teachers conduct follow-up activities with their students, after they have viewed an instructional television program?

24. Extent to which you feel that the content of instructional television programs is at the appropriate grade level?

Rate: 1 = never 3 = usually
2 = sometimes 4 = always

Instruction and Scheduling of Instructional Television

25. Do you feel that your teachers would like to be able to repeat having a class view a particular instructional television program at a later time after its initial showing?

26. Does the present schedule for instructional television interfere with the general organization of the instructional program in your school system?

27. Do your teachers cooperate with one another in adjusting their class meetings in order that their students may view instructional television programs?

28. Is the decision to use a particular instructional television series in your schools made by you?

29. Is the decision to use a particular instructional television series in your schools made by each individual teacher?

30. Is the decision to use a particular instructional television series in your schools made by each individual principal?

31. Extent to which you feel that the programs on instructional television are up-to-date in terms of the validity of their content?

32. Extent to which you feel your teachers learn subject matter content as a result of watching instructional television?

33. Extent to which you feel your teachers learn teaching techniques from watching the television instructor?

34. Extent to which you feel that your teachers organize their classroom activities around instructional television lessons?

35. Extent to which you feel that the use of instructional television tends to lend structure to the classroom lesson in your school?

36. Extent to which you feel that the use of instructional television causes your teachers to plan their lessons more closely?

37. Extent to which you feel that the instructional television presentations are appropriate for the grade level for which they are designed?

Relationship of Instructional Television to Parents and PTA Groups

38. Extent to which PTA groups in your school system devote time to instructional television and its use in the schools?

39. Do PTA's in your school system give financial aid toward the purchase of materials or equipment related to instructional television?

In order for us to make as much sense as possible out of the data, our research staff would like to obtain some information about the questionnaire respondents. Would you take a last few minutes and answer the following questions.

40. Your sex.

1) male
2) female

41. Your age.

1) Under 25
2) 25-35
3) 36-45
4) 46-55
5) over 55

42. Number of years you have been a curriculum specialists or coordinator including this year.

1) 1
2) 2-5
3) 6-10
4) 11-15
5) more than 15

43. Highest college degree or certificate held. (Check only one.)

1) Bachelor's
2) Master's
3) Specialist (6th Year)
4) Doctorate

44. Number of years you were a classroom teacher.

1) less than 3
2) 3-6
3) 7-10
4) 11-15
5) more than 15

45. Number of years you were a principal.

1) 0
2) 1-3
3) 4-6
4) 7-10
5) more than 10

46. Approximate total number of pupils in your school system.

1) less than 1000
2) 1000 - 3000
3) 3000 - 6000
4) 6000 - 20,000
5) more than 20,000

47. Number of elementary schools in your school system.

1) less than 5
2) 5-10
3) 11-20
4) 21-50
5) more than 50

48. Number of elementary schools in your school systems equipped with television sets.

1) less than 5
2) 5-10
3) 11-20
4) 21-50
5) more than 50

APPENDIX F

Lower Grades Elementary Form of ITV Questionnaire

Directions for Administering

"How I Feel About Television In School"

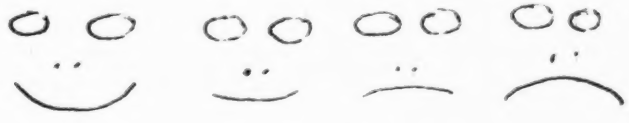
Say: "Some professors at the University of Georgia are interested in how children feel about television in school. I am going to read you some questions about how you might feel toward television in school. Then I will ask you to show me on a paper how you feel. I will not see your answers to the questions I read. They will be snet to the University. Do not write your name on your apper."

Hand out test paper to each child. Be ure each child has a pencil for marking the test.

Say: "If you are a boy write "B" in the box at the top of your paper. If you are a girl write a "G" in the box at the top of your paper. You will show how you feel by marking an X (write X on the board) on the face that shows how you feel. You will mark one face for each question that I read. Be sure that you mark the face for the question I am reading."

Sample Questions

Draw the following four faces on the board.



Say: "These faces go from very happy (Point to face on Left) to less happy (point to second face from left), to rather unhappy (point to second face from right), to very unhappy (point to face on right). Notice, that on your papers, there are the same four faces for each number. I will read a question to you for each set of faces and you put an X (point to X which you have drawn on board) on the one face in the set that best shows how you feel about what the question is asking. Be sure the X covers all of the face, like this (draw an X through one of the faces on the board)."

Say: "Let's do the sample questions at the beginning of your sheet. Find the set of faces next to the letter "A".

Say: "How do you feel about eating ice cream? Mark an X on the face in Set A that best describes how you feel about eating ice cream. How many of you marked the very happy face? Raise your hands. How many of you marked the very unhappy face? Raise your hands."

Say: "Go to Set B. How do you feel when you get hurt? Mark the face in Set B that shows how you feel when you get hurt?" (Ask for a boy's response and then for a girl's response.)

Say: "Go to Set C. How do you feel about playing with dolls? Mark the face in Set C that shows how you feel about playing with dolls. Perhaps some of you marked one of the middle faces this time to show that you feel less strongly about playing with dolls."

Say: "Do you get the idea of how to show how you feel by marking one face for each question?"

For each question you read be sure to say the number and be sure all the children are marking the set of faces that correspond to the number of the question you are reading.

Use this format for reading each of the questions: read the number of the question and then read the question.

Say: "Let's begin. Find Number 1."

Read question #1 and allow a silent count of four to yourself before going on to question #2. Allow more time between questions if your class needs it but try to keep the intervals between questions equivalent.

After all questions have been asked, choose a child to collect all of the answer sheets.

1. How do you feel about school?

2. How do you feel about watching television at home?

3. How do you feel about watching television in school?

4. How do you feel about learning from television in school?

5. How do you feel about the television teachers?

6. How do you think the boys and girls in this class feel about television in school?

7. How do you feel about things the television teacher tells you to do?

8. How do you feel about the way your classroom teacher does things that the television teacher suggests?

9. How do you feel about seeing the same teachers on television each week?

10. How do you think your classroom teacher feels about television in school?

11. How do you feel when the television set is turned off in your classroom?

12. How do you feel about how good your classroom television looks and sounds when it is on?

13. How do you feel about the things that the television teacher uses?

14. How do you feel when you think about television?

15. How do you think your mother and father feel about television in school?

16. How do you feel about the pictures and drawings that the teacher on television uses in talking about the lesson?

17. How do you feel about the things (that I do) (that your classroom teacher does) before you watch the television in school?

18. How do you feel about the things (that I do) (that your classroom teacher does) after you watch television in school?

19. How do you feel about the teachers in (your) (our) school?

20. How do you feel about the questions that you have been asked today?

APPENDIX G

Upper Elementary Grade Form of ITV Questionnaire

Boy _____ Girl _____

Age _____ Grade _____

School _____

Directions: Below are 15 questions that can be answered either yes or no. Please circle what you believe to be the right answer for you.

Yes No 1. Do you like to watch television in school?

Yes No 2. Do you think that watching television in school helps you with your school work?

Yes No 3. Do you ever watch television in school?

Yes No 4. When you are at home during school hours, do you ever watch the same shows as you see in school?

Yes No 5. Does your teacher ever talk about a television show before you see it?

Yes No 6. Do you ever do any of the things that the television teacher tells you to do?

Yes No 7. Do you like the television teachers?

Yes No 8. Does your teacher ever talk about a television show after you see it?

Yes No 9. Do you watch television in school everyday?

Yes No 10. Does your teacher ever assign a television program for you to view at home?

Yes No 11. Do you think that you learn from watching television in school?

Yes No 12. Do you keep a television notebook?

Yes No 13. Have any of the television teachers ever visited in your school?

Yes No 14. Have you done a project as a result of watching a television program in school?

Yes No 15. Do you think that television in your school has improved your educational opportunities?

Part II

Upper Elementary Grade Form of ITV Questionnaire

Boy _____ Girl _____

Age _____ Grade _____

School _____

Directions: Complete these sentences with the first thought which comes to you.

1. Television in school is _____.
2. My favorite television program that I see in school is _____

_____.
3. Our television set in school is _____

_____.
4. When it is time for our television lesson _____

_____.
5. When our television lesson is over _____

_____.
6. Television lessons are _____.
7. We watch television in school because _____

_____.
8. A good television lesson _____.
9. Television lessons should _____

_____.
10. A good television teacher is _____.
11. Television notebooks _____

_____.
12. I like to watch television in school better than _____

_____.
13. Write three sentences in the following spaces about you and television in school.

APPENDIX H

INSTRUCTIONAL TELEVISION QUESTIONNAIRE -- PARENT FORM

Date: _____ ID No. _____ (For office use only.)

How many children in your family? _____

Please indicate the grade level and school each child attends _____

_____

Please circle either yes or no for each question.

Yes No 1. Do you ever watch what is presented on one of the television stations operated or leased by the Georgia State Department of Education between the hours of 8:30 a.m. and 3:00 p.m.?

Yes No 2. Does your child(ren) ever spontaneously discuss a program or programs he has seen in school?

Yes No 3. Do you feel that instructional television helps your child with his homework?

Yes No 4. Have you attended any school related meetings in the last year at which instructional television was discussed?

Yes No 5. Have you attended any school related meetings in the last year at which an individual from the Georgia State Department of Education spoke on instructional television in the schools?

Yes No 6. Have you read any articles in the last year, in either newspapers or magazines, devoted to instructional television?

Yes No 7. Do your children ever watch instructional television between the hours of 8:30 a.m. and 3:00 p.m. when they are at home during the school year?

Yes No 8. Are your children ever required to watch a television program as a homework assignment?

APPENDIX I

COMMUNIQUE EVALUATION FORM

Name of Communique: _____

Date Seen: _____

Directions: Please rate each statement by selecting an appropriate number. Mark your choice on the special answer sheet with a soft lead pencil if at all possible. If a particular statement does not apply to you or your situation, or you honestly feel you cannot make a judgment about it, leave the space for that item blank. If you wish to change a rating be sure to erase completely before making a new mark. Note that the answer sheet is set up so that you make ratings to questions numbered sequentially across the page from left to right.

1 = Poor
2 = Fair
3 = Average
4 = Above Average
5 = Excellent

1. The extent to which this communique will aid you in your classroom teaching.

2. Effectiveness of presentation.

3. The extent to which topics presented in the communique are relevant to your teaching situation.

4. Usefulness of information provided by the communique.

5. Clarity of communique objectives.

6. The effectiveness of the format of the communique.

7. Organization of the communique.

8. Extent you feel that you will be able to incorporate the suggested teaching techniques into your classroom.

9. Scheduling of this particular communique.

10. Accessibility of resources suggested in this communique.

11. Value of guest lecturer or presenter (if applicable).

12. Practicalness of television teacher suggestions.

13. Emphasis and amount of time given each lesson covered in the communique.

14. Accuracy of material presented in communique.

Rate each of the following statements numbered 15-20 indicating your judgment of the extent to which the communique

15. will directly contribute to the subject matter of your class.

16. will enrich the instructional program of your class.

17. will help you stimulate student interest in the subject.

18. contains materials usable for follow-up activities.

19. will help you structure content in a manner that will help students realize the objectives of the entire series of instructional television programs.

20. will help you structure content in a manner that will help students realize the objectives of the course

21. Overall worth of the communique in terms of the time that you spent watching it.

22. List what you see as the instructional strengths of the television teacher.

23. List what you see as the instructional weaknesses of the television teacher.

24. What other questions do you feel should be added to this questionnaire?

APPENDIX J

MANUAL LESSON EVALUATION FORM

Name of Manual: _____

Lesson Number: _____ Date: _____

Directions: Please rate each statement by selecting an appropriate number. Mark your choice on the special answer sheet with a soft lead pencil if at all possible. If a particular statement does not apply to you or your situation, or you honestly feel you cannot make a judgment about it, leave the space for that item blank. If you wish to change a rating be sure to erase completely before making a new mark. Note that the answer sheet is set up so that you make ratings to questions numbered sequentially across the page from left to right.

1 = Poor
2 = Fair
3 = Average
4 = Above Average
5 = Excellent

1. Comprehensiveness of information in manual available for teaching.
2. Unity of lesson ideas.
3. Degree of correlation of lesson with state textbook guides.
4. Suggestions for follow-up exercises after each lesson.
5. Practicalness of follow-up exercises.
6. Suggestions for pre-television exercises.
7. Practicalness of pre-television exercises.
8. Availability of materials and/or equipment required for follow-up exercises.
9. Availability of materials and/or equipment required for pre-television exercises.
10. Appeal of lesson content to students.
11. Level of difficulty for students.
12. Adequacy of lesson bibliography.
13. Articulation of this lesson with related lessons.
14. Definitions of new and unfamiliar terms.
15. Accuracy of lesson material.

16. Readability of lesson material.

17. Adaptability of lesson material for classroom use.

18. Adequacy of illustrative material.

19. Usefullness of appendix and supplementary materials.

20. Integration of illustrative material with text.

The following six questions deal with various characteristics of the entire program manual.

21. General physical appearance of manual.

22. Convenience of left hand binding.

23. Adequacy of print size and type.

24. Use of center and side headings.

25. Size of manual (outside dimensions).

26. Type of binding.

APPENDIX K

TEACHER BEHAVIORAL OBJECTIVES - TELELESSON 32

WONDERFUL YOU

1. The teacher will compare and contrast urban renewal with open space development.
2. The teacher will state the two most important problems confronting urban renewal planners.
3. The teacher will state the set of factors most important to consider in residential redevelopment.
4. The teacher will state a brief definition of "human communities."
5. The teacher will state a brief plan to follow in modernizing a downtown urban area.
6. The teacher will state a prime factor in urban renewal open space development.
7. The teacher will state the most important factor to consider in planning a model community.
8. The teacher will state the major purpose of urban renewal.
9. The teacher will state the reasons for orderly development of a plan for a community.
10. The teacher will state the criteria needed for long range planning of a community.
11. The teacher will state the characteristics of a well planned community.
12. The teacher will compare and contrast the zoning of a planned community with a community without zoning restrictions.
13. The teacher will state the effects of a poor system of transportation in a community.
14. The teacher will state the effects of environmental pollution in his community.
15. The teacher will state reasons for recreational facilities in a well planned community.
16. The teacher will state the advantages of urban renewal.
17. The teacher will state the disadvantages of urban renewal.
18. The teacher will state the good points in urban renewal.
19. The teacher will state various sources for financing urban renewal projects.
20. The teacher will state the advantages of the use of a city planner in development or redevelopment of a city.

TEACHER BEHAVIORAL OBJECTIVES - TELELESSON 33

WONDERFUL YOU

1. The teacher will state the first area or zone to be developed in Brasilia.
2. The teacher will state the first major problem to confront planners in the construction of Brasilia; e.g. the development of adequate roads.
3. The teacher will state the geographic location of Brasilia.
4. The teacher will state the four major areas or zones developed in Brasilia.
5. The teacher will state the major risk that the government of Brazil took in building the city of Brasilia in an unsettled area.
6. The teacher will locate on a map of Brasilia the four major areas or zones of the city.
7. The teacher will state the size relationship of Brazil to the United States.
8. The teacher will state some of the natural resources of Brazil.
9. The teacher will discuss the reasons for developing Brasilia in the central area of Brazil.
10. The teacher will state the reasons for building roads to all parts of Brazil.
11. The teacher will describe the development of the areas outside of the four main areas or zones.
12. The teacher will describe the general shape of the city of Brasilia.
13. The teacher will state the reasons for a business district between the two main residential zones in Brasilia.
14. The teacher will describe the recreational zoning of Brasilia.
15. The teacher will state the name of the designer of Brasilia; e.g. Erico Costa.
16. The teacher will describe the risk that the government of Brazil took in constructing Brasilia in the central part of the country.

APPENDIX L

ED 076628

TM 002 633

TEACHER ACHIEVEMENT TEST

DIRECTIONS: Use the special answer sheet provided, marking the number of the alternative which corresponds to your choice. Use the pencil provided and erase completely if you decide to change an answer. Note that the answer sheet is set up so that the questions go across the page from left to right.

When in doubt about how to respond to a question make your best educated guess. Would you also please answer each question in order, omitting none, and not look back or ahead at other questions.

1. The two most important problems confronting urban renewal planners are concerned with

   1) recreation and finance.
   2) transportation and education.
   3) education and finance.
   4) business and transportation.
   5) recreation and public housing.

2. Which one of the following sets of factors is the most important to consider in residential redevelopment?

   1) Factories, recreational, education.
   2) Roads, financies, transportation.
   3) Education, transportation, factories.
   4) Education, finance, transportation.
   5) Railroads, education, finance.

3. Human communities are communities that

   1) are designed around human activities
   2) meet the needs of the people.
   3) are the ideal in comfort and living.
   4) meet the needs of the designer.
   5) are designed only for the people of tomorrow.

4. The first area or zone to be developed in Brasilia, the new modern capitol of Brazil, was the

   1) business area.
   2) residential area.
   3) recreational area.
   4) government area.
   5) financial area.

5. Which one of the following plans summarize the best action to be taken in modernizing a downtown urban area?

1) Build residential areas in the main part of town.
2) Group closely related services in central areas.
3) Building business and industrial areas in the main part of town.
4) Build a road all the way around the city.
5) None of the above would help.

6. A prime factor in urban renewal open space development is the

1) route to recreational areas.
2) location of the main lakes.
3) route of the main railroads.
4) accessibility to basic services.
5) location of all trees and shrubs.

7. The first major problem to confront planners in the construction of Brasilia was the development of adequate

1) roads.
2) sewers.
3) hydroelectric plants.
4) securing property rights to the land.
5) None of the above.

8. Brasilia, the capital of Brazil, is located geographically

1) in the center of the country on a high plain.
2) along a major river in the country.
3) near the ocean.
4) in a high mountain area.
5) on a desert plain.

9. Which one of the following factors would be most important in planning a model community?

1) Development of transportation facilities.
2) Organizing the proposed community into zones.
3) Establishing a communications network
4) Providing for recreational areas.
5) Planning for one or more major industries.

10. Brasilia has four major areas or zones. These include:

1) Recreational, central business, financial, residential
2) Residential, financial, government and recreational
3) Residential, industrial, central business, government
4) Residential, central business, lake resort, government
5) Central business, financial, government, recreational

11. The major risk that the government took in building the city of Brasilia in an unsettled area was

1) that the city would not be integrated into the country's economy.
2) that the city would be inaccessible to world trade markets.
3) that the heavy rainfall experienced in the fall would isolate the city.
4) that ships could not reach the docks of the city because of low water at certain times of the year.
5) None of the above.

12. Roads and streets should be the first development to take place in a new model community.

1) yes
2) no

13. Rapid transit is generally a handicap to the orderly growth of a community

1) yes
2) no

14. A model city should be independent of surrounding cities for its own growth and protection

1) yes
2) no

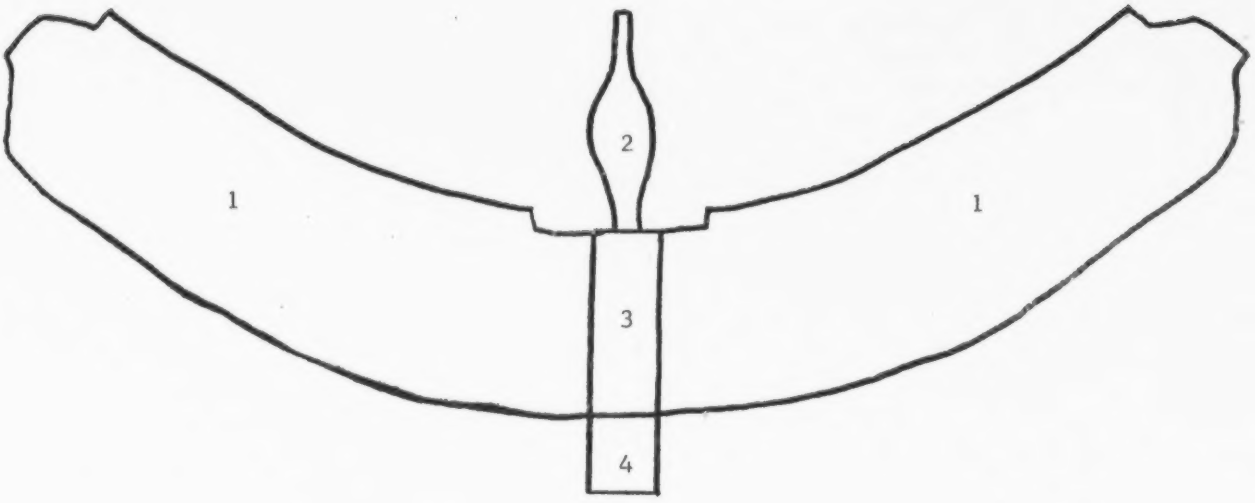
15. A major purpose of urban renewal is to replace existing buildings with better structures

1) yes
2) no

16. Open space development is more difficult than urban renewal development.

1) yes
2) no

Questions 17 to 20 are based on the following outline of Brasilia.



17. Area number 1 in the diagram of Brasilia defines the location of

1) Residences
2) Industries
3) Businesses
4) Recreational Facilities
5) Government Offices

18. Area number 2 in the diagram of Brasilia defines the location of

1) Residences
2) Industries
3) Businesses
4) Recreational Facilities
5) Government Offices

19. Area number 3 in the diagram of Brasilia defines the location of

1) Residences
2) Industries
3) Businesses
4) Recreational Facilities
5) Government Offices

20. Area number 4 in the diagram of Brasilia defines the location of

1) Residences
2) Industries
3) Businesses
4) Recreational Facilities
5) Government Offices

APPENDIX M

STUDENT BEHAVIORAL OBJECTIVES - TELELESSON 32

WONDERFUL YOU

1. The student will state the things that make his community a better place in which to live.

2. The student will state the things that need to be changed in his community, in order to make it a better place to live; e.g. reduce air pollution, etc.

3. The student will compare and contrast the differences and similarities between two or more different communities that he has visited.

4. The student will make a collection of pictures and articles about the different types of communities.

5. The student will locate his home town on a map.

6. The student will work with a group of students in constructing a model of an ideal city.

7. The student will explain the reason slum areas are chosen for redevelopment.

8. The student will state the reasons communities change.

9. The student will state the meaning of urban renewal.

10. The student will state the meaning of open-space renewal.

11. The student will state the reasons it is necessary to have building codes.

12. The student will state the important considerations that a good city planner must be concerned with in developing plans for a city.

13. The student will state reasons industrial areas should be located away from residential and other commercial areas or zones.

14. The student will state the reasons schools should be located in quiet or residential zones.

STUDENT BEHAVIORAL OBJECTIVES - TELELESSON 33

WONDERFUL YOU

1. The student will describe the geographic location of Brasilia.
2. The student will locate Brasilia on a map of Brazil.
3. The student will describe the general shape of the city of Brasilia.
4. The student will describe the four major areas or zones of Brasilia.
5. The student will state the major functions of each of the four major areas or zones in Brasilia.
6. The student will state the lessons it is essential to plan ahead in the construction of a city.
7. The student will compare and contrast the model city that he has assisted in developing (Objective 6 - Lesson 32) with Brasilia.
8. The student will state the reasons forest areas are important to the economy of Brazil.
9. The student will locate the Amazon River on a map of Brazil.
10. The student will state the reasons for building the city of Brasilia in the central jungles of Brazil.
11. The student will locate on a map of Brasilia, the various areas or zones of the city.

APPENDIX N

ED 076629

TM 002 634

STUDENT ACHIEVEMENT TEST - WONDERFUL YOU

Directions: Some people at the University of Georgia have made up a test to go along with a school television program that some of you have seen. The program is Wonderful You. They are interested in finding out how different students in different schools and cities in Georgia will do on their test. They are trying it out with some students who have seen some of the Wonderful You programs and also with some students who have not seen the program. I want to find out how well you do on this test. Only the people at the University will see your score on the test. Some questions will be easy and some not so easy. Try to do your best.

Let's try out some practice questions. For example you might see a question like this:

Question A: Where does a man wear his hat?

_____ 1. On his hands
_____ 2. On his feet
_____ 3. On his head

Men wear their hats on their heads. We all knew that, right? To show that we knew the right answer, let's put a big "X" in the space next to number 3. It should look like this:

Where does a man wear his hat?

_____ 1. On his hands
_____ 2. On his feet
__X__ 3. On his head

Now we will look at some other questions. You will answer them by putting an "X" in front of your choice. I will read all of the questions to you. Do you have any questions? If you do have any questions at any time just raise your hand and I will come to you to answer it. O.K., Let's begin.

1. The people who planned the city of Brasilia tried to make it in the shape of a
   _____ 1. Plane
   _____ 2. Train
   _____ 3. Doughnut

2. Brasilia is located on the continent of
   _____ 1. North America
   _____ 2. Africa
   _____ 3. South America

3. What was the first thing built in Brasilia?
   _____ 1. Houses
   _____ 2. Roads
   _____ 3. Stores

4. Why was it decided to build Brasilia in the location that was finally chosen?
   _____ 1. Because it was close to a good harbor
   _____ 2. Because it was near many natural resources
   _____ 3. Because the climate was best there

Here is a different set of questions. We will answer these questions by encircling the word YES or NO. For example:

Question B: YES NO Is Atlanta the capitol of Georgia?

The answer is of course "Yes". In order to let everyone know that we know the answer we encircle the word "Yes". It would look like this:

(YES) NO Is Atlanta the capitol of Georgia?

Is there anyone who does not understand the directions? Now we will answer some more questions just like the one about Atlanta. I will read each of them with you.

YES NO 5. Planning for changes in your community will save time and money in the future?

YES NO 6. Should commercial zones in cities have grass and flowers?

YES NO 7. Should schools be located in the industrial zones of the cities?

YES NO 8. Do city governments need to have building zones and codes to protect citizens from getting in the way of each other?

YES NO 9. Are factories found in residential zones of a city?

YES NO 10. Are office buildings found in commercial zones of the cities?

YES NO 11. Are warehouses found in the industrial zones of cities?

YES NO 12. Are industrial zones usually built near rivers and railroads?

YES NO 13. The park and lake areas of Smalltown were built a short distance out of the town?

YES NO 14. Someone who helps plan a city is called a "City Planner?"

YES NO 15. The city of Brasilia was planned by Costa.

YES NO 16. Office areas are usually built near residential areas so the people will be near schools.

YES NO 17. Careful planning in building a community will result in an unattractive community.

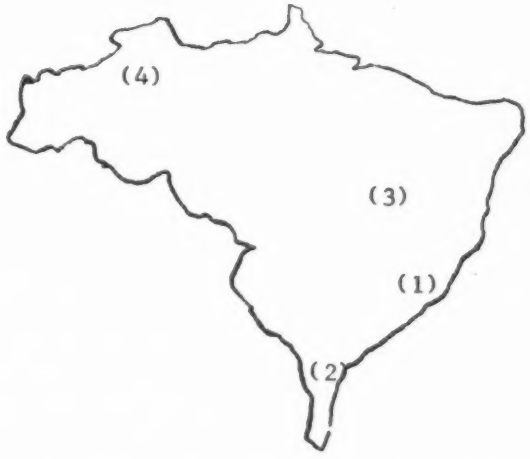
YES NO 18. Schools should be located in the quiet parts of the town?

YES NO 19. The most important things in community planning are the needs of the people?

Now we have some questions that use a map of Brazil.

20. Which one of the numbers 1, 2, or 3 shows the location of the Amazon River. "Put an "X" in front of the number.

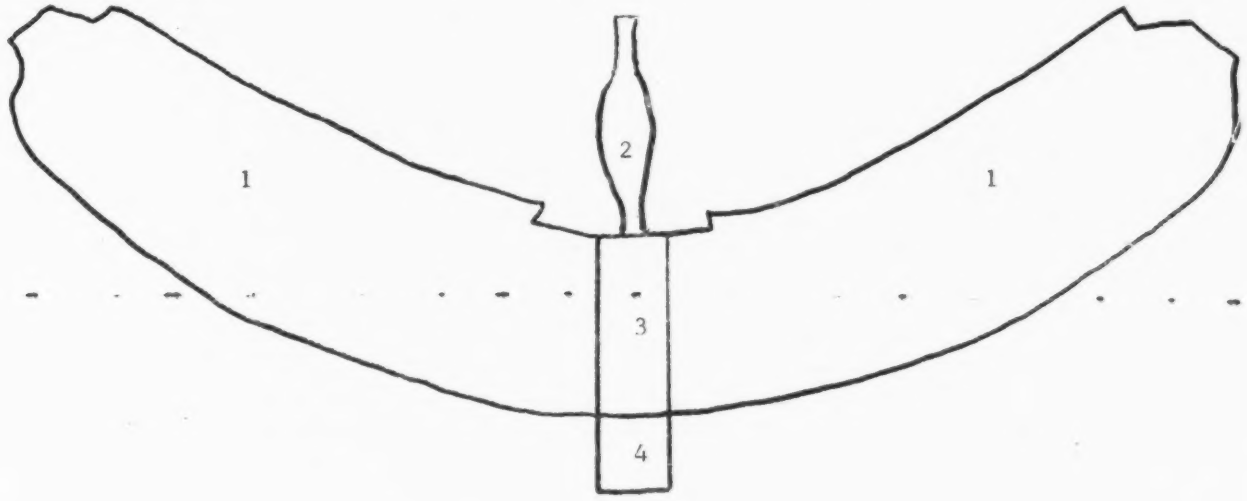
_____ 1.
_____ 2.
_____ 3.



21. This is another map of Brazil. Which number shows the location of the new capitol, Brasilia. Put an "X" in front of the number.

_____ 1.
_____ 2.
_____ 3.
_____ 4.

The next four questions have to do with where different places are located in the city of Brasilia, the new capitol of Brazil. Look carefully at this map of Brasilia.



22. Put an "X" in the space in front of the number where people live and have their houses.

_____ 1 and 1.
_____ 2.
_____ 3.
_____ 4.

23. Put an "X" in the space in front of the number where people buy and sell things in business.

_____ 1 and 1.
_____ 2.
_____ 3.
_____ 4.

24. Put an "X" in the space in front of the number where things are manufactured in industries.

_____ 1 and 1.
_____ 2.
_____ 3.
_____ 4.

25. Put an "X" in the space in front of the number where the city government and the Mayor have their offices.

_____ 1 and 1.
_____ 2.
_____ 3.
_____ 4.

APPENDIX C

TEACHER BEHAVIORAL OBJECTIVES FROM COMMUNIQUE TELELESSONS 30 AND 31

PATTERNS

1. The teacher will review with the class how to count off the measure of a one-dimensional line by using a unit of length, e.g., a string.

2. The teacher will review with the class how to measure the area of a two-dimensional plane region by placing square units of uniform size on a given plane region and counting the number of square units necessary to cover the plane region.

3. The teacher will review with the class the four basic principles of measurement:

   a. the unit of measure must be the same unit as the thing being measured.
   b. measurement is expressed by numbers.
   c. measurements are approximate.
   d. the smaller the unit of measure chosen, the more precise the measurement will be.

4. The teacher will state the definition of a space figure.

5. The teacher will illustrate a space figure.

6. The teacher will state the definition of a simple closed surface.

7. The teacher will state the definition of a three-dimensional space region.

8. The teacher will illustrate a three-dimensional space region.

9. The teacher will state similarities and differences between the two approaches to introducing the study of geometry.

10. The teacher will illustrate different plane regions which can be visualized as simple closed surfaces.

11. The teacher will cut out different plane regions and construct simple closed regions from them.

TEACHER BEHAVIORAL OBJECTIVES FROM MANUAL - TELELESSONS 30 AND 31

PATTERNS

Lesson 30

1. The teacher will state the definition of a space figure.
2. The teacher will show several examples of space figures.
3. The teacher will state the definition of a simple closed surface.
4. The teacher will show several examples of simple closed surfaces.
5. The teacher will point out the interiors of several simple closed surfaces.
6. The teacher will state the definition of a space region.
7. The teacher will show several examples of space regions.
8. The teacher will state the definition of volume.
9. The teacher will state the definition of a unit space region.
10. The teacher will write additional pre-lesson questions, if necessary, for a discussion concerning the volumes of various size containers.
11. The teacher will conduct an activity comparing the volumes of different size bottles in the following way:

    a. the teacher will instruct the class to gather different size bottles.
    b. the teacher will number and arrange the bottles.
    c. the teacher will ask each student to list in descending order the six bottles having the largest volumes.
    d. the teacher will poll the class, by a show of hands, to determine which eight bottles the class chose as having the greatest volumes.
    e. the teacher will place the eight "finalist" bottles in full view of the class.
    f. the teacher will ask the class to state which bottle is largest, next largest, etc.
    g. the teacher will line up the selected bottles in descending order.
    h. the teacher or student will fill the largest bottle with water or sand.
    i. the teacher or student will pour the contents of the largest bottle, etc., until the descending order is decided by this comparison of volumes.
    j. the teacher will ask the students to check their lists.

12. The teacher will conduct an activity in estimating the volumes of fruit jars of the same size by using various unit space regions in the following way:

    a. the teacher will gather fruit jars of the same size, their tops, various size unit space regions, and paper bags.
    b. the teacher will pair the students.
    c. the teacher will fill the jars with various unit space regions, e.g. peas, beans, sand, acorns, marbles, etc.
    d. the teacher will ask the class to estimate the number of unit space regions in the different jars.
    e. the teacher will discuss with the class the estimation made by each pair of students.
    f. as a result of the discussion, the teacher and class will arrive at an estimation of the number of unit space regions in each jar.
    g. the teacher will distribute a jar, a top, and a paper bag to each pair of students.
    h. the teacher will ask the students to find the most efficient way of estimating the contents of the jars without counting each unit space region.
    i. the teacher will give each pair of students a chance to measure at least three jars containing different unit space regions.

13. The teacher will prepare and distribute to each student a copy of the sample worksheet in the manual and do the following:

    a. the teacher will ask the students to examine the various size vases on the worksheet.
    b. the teacher will ask the students to guess which of the vases will hold the most water.
    c. the teacher and the students will discuss all of their choices.
    d. the teacher will ask the questions listed at the end of this manual activity.
    e. the teacher will ask the students to mark the half way point on each vase.

14. The teacher will read the reference materials which are suggested in the manual.

Lesson 31

1. The teacher will discuss with the class whether a unit of length, a unit of area, or a unit of volume would be used to determine the measures of various space figures such as those listed in the manual.

2. The teacher will demonstrate a way to estimate the volumes of space regions in the following way:

    a. the teacher will fill the bottom of a space figure with unit space regions.
    b. The teacher will count the unit space regions necessary to cover the bottom of the space figure.

c. the teacher will estimate the number of space regions which will fit up the side of the space figure.
d. the teacher will multiply the number of layers by the number of units in each layer, thus arriving at an estimate of the number of unit space regions in the space figure

3. The teacher will state the formula for obtaining the volume of a cube or rectangular prism:

   Volume = area of base X height

4. The teacher will state the formula for obtaining the volume of a rectangular prism:

   Volume = length X width X height

5. The teacher will state the formula for obtaining the volume of a cube:

   Volume = length of side X length of side X length of side

6. The teacher will show the class various rectangular prisms and cubes, and have each student decide on the volume of each by following the procedure described in objective 2.

7. The teacher will give each student problems to solve in which the student will use the formula: Volume = area of base X height.

8. The teacher will give each student problems in finding the volumes of figures having other than square or rectangular bases and ask the student to find the maximum and minimum volume of each.

9. The teacher will prepare and distribute to each student a copy of the sample worksheet in the manual and instruct each student to find the volume of each figure.

10. The teacher will read the reference material listed in the manual.

APPENDIX P

PATTERNS OBSERVATION SUMMARY

Observer _____ Teacher _____

School _____ Date _____

Time Begin Observation _____ Time End Observation _____

Objectives 1 - 52 deal with content of telelesson 30.

1. Unit of measure must be the same unit as the thing being measured
2. Measurements are expressed by numbers
3. Measurements are approximate
4. The smaller the unit of measure chosen, the more precise the measurement
5. Definition of space figure
6. Examples of space figure
7. Definition simple closed surface
8. Examples of simple closed surfaces
9. Pointing out of interiors of simple closed surfaces.
10. Examples of different plane regions which can be visualized as simple closed surfaces
11. Different plane regions cut out to show how simple closed regions can be constructed from them
12. Definition of 3-D space region
13. Examples of 3-D space regions
14. Definition of unit space region
15. Definition of volume
16. Differences between 2 approaches to study of geometry introduced
17. Similarities between the 2 approaches to introducing the study of geometry
18. Using arbitrary unit of length (e.g. string) count off measure of a one-dimensional line
19. Measuring area of 2-D plane region by placing square units of uniform size on given plane region and counting number of square units necessary to cover plane region

---

* The 3 response categories are: Teacher Gives, Teacher Asks, Pupil(s) Responds.

Activity comparing volumes of different size bottles:

20. Arrangement and numbering of bottles
21. Listing in descending order six bottles having largest volume
22. "Finalist" bottles placed in full view of class
24. Deciding which bottle is largest, next largest, etc.
25. Selected bottles are lined up in descending order
26. Largest bottle is filled with water or sand
27. Contents of largest bottle is poured into next largest bottle on down until descending order is determined
28. Lists are checked
29. Principle from experiment

Activity in estimating volumes fruit jars of same size by using various unit space regions:

30. Students are paired
31. Jars filled with various units space regions (peas, beans, sand, marbles)
32. Estimation of number of unit space regions in different jars
33. Discussion of estimation made by each pair of students
34. Estimation of unit space regions in each jar
35. Finding of most efficient way of estimating content of jars without counting each unit space region
36. Estimating by counting number of items cap or top of jar will hold and counting number of topsful that will go into jar
37. Estimating by emptying jar and covering bottom with items, if jar is relatively straight. Using one item to see how many times it will fit up the side of the jar.
38. Estimating by another method other than number 38
39. Opportunity for each pair of students to measure at least 3 jars containing different unit space regions

39a. Discussion of Principle from experiment

40. Conclusion hoped for is no one wants to measure jar with sand
41. Conclusion that jars with smaller items hold more items than jars with larger items
42. Conclusion that smaller the unit of measure the closer the approximation of the volume of the jar
43. Conclusion that volume may be measured by multiplying the number of items in layer by number of layers

Worksheet activity

44. Various size vases on worksheet are examined

45. Students guess which of vases will hold most water

46. Discussion of all choices

47. Questions listed at end of manual are asked: At what point would water be in each of these vases if the vases were half full?

48. Question: At what point would the water be in each of the vases if the vases were a quarter full?

49. Question: Is half the height of the vase the half way point on all the vases?

50. Students mark half way point on each vase

51. Other questions asked

52. Principle of experiement

Objectives 53 - 75 deal with content of telelesson 31.

Discussion of whether unit of length, unit of area, or unit of volume would be used to determine measures of various space figures such as these listed:

53. Size of schoolroom floor

54. Length of curtain rod

55. Amount of ice that can fit in picnic ice chest

56. Size of gas tank in school bus

57. Size of a mirror

58. Size of a desk drawer

59. Size of a packing carton

60. Height of a door

61. Size of a chalk box

62. Other (indicate number of other examples)

Demonstration of way estimate volume of space regions in following way:

63. Bottom of space figure is filled with unit space regions

64. Unit space regions necessary to fill bottom of space figure are counted

65. Number of space regions which will fit up side of space figure estimated

66. Number of layers multiplied by number of units in each layer, thus arriving at an estimate of number of unit space regions in the space figure

67. Formula for obtaining volume of cube or rectangular prism: volume = area of base X height

68. Formula for obtaining the volume of rectangular prism: volume = area of base X height

69. Formula for obtaining volume of a cube: Volume = length of side X length of side X length of side

70. Class views various rectangular prisms and cubes and each student decides on volume of each by following the described procedures in numbers 63 through 66

71. Problems to solve using the formula: Volume = area of base X height

72. Problems in finding volume of figures having other than square or rectangular bases Students are asked to find maximum and minimum volume of each

73. Volume of each figure is estimated

74. Other activity or classroom exercises

75. Teacher reads reference material listed in manual.

MATERIALS CHECKLIST

Directions: Please take this checklist with you each time you visit the classroom. Check once if you find evidence of any of the materials in the classroom. For example: If you observe a group of different size bottles in the classroom, even if they are not used, you should place a check in the appropriate column. If you observe the teacher using additional instructional materials, related to the lesson, please describe these.

	First Observation	Second Observation	Third Observation	Fourth Observation
1. Group of different size bottles				
2. Group of same sized jars, with caps. Jars should be filled with different fillers, e.g. beans, peas, sand, acorns, marbles, sweet-gum balls, etc.				
3. Empty jar, top and paper bag for each pair of students				
4. Worksheets (p. 223 from Teacher Manual)				
5. Worksheets (p. 226 from Teacher Manual)				
6. Comment: Describe any additional materials teacher has prepared which are related to instructional objectives. (specify to which visit comment applies)				

STUDENT BEHAVIORAL OBJECTIVES - TELELESSON 30

PATTERNS

1. The student will state the four basic principles of measurements:

   a. the unit of measure must be the same unit as the thing being measured.
   b. measurement is expressed by numbers.
   c. measurements are approximate.
   d. the smaller the unit of measure chosen, the more precise the measurement will be.

2. The student will count off the measure of a one-dimensional line by using a unit of length, e.g., a string.

3. The student will measure the area of a two-dimensional plane region by placing square units of a uniform size on a given plane region and counting the number of square units necessary to cover the plane region.

4. The student will state the definition of a plane region.

5. The student will state the definition of a space region.

6. The student will construct a simple closed surface from a paper model of a plane region.

7. The student will state the definition of a simple closed surface.

8. The student will identify the three parts of a simple closed curve.

   a. simple closed surface
   b. interior
   c. exterior

9. The student will state the definition of a three-dimensional space region.

10. The student will construct a space region from a paper model of a plane region.

11. The student will name some useful space regions.

12. The student will state the definition of a unit space region.

13. The student will demonstrate ways of finding the approximate measurement of cylindrical, rectangular, and square space regions by placing various sizes and kinds of unit space regions in the different space figures.

STUDENT BEHAVIORAL OBJECTIVES - TELELESSON 31

PATTERNS

1. The student will count off the measure of a one-dimensional line by using a unit of length, e.g., a string.

2. The student will measure the area of a surface (plane region) by counting the number of times his hand fits on his desk top.

3. The student will state the definition of a cube.

4. The student will find the approximate measurement of rectangular unit space regions in the rectangular prism.

5. The student will state the definition of volume of a space region.

6. The student will measure the area of the base of a rectangular prism by counting the number of unit space regions covering the base.

7. The student will measure the area of the base of a cube by counting the number of unit space regions covering the base.

8. The student will state the formula for obtaining the volume of a rectangular prism or a cube:

   Volume = area of base X number of layers

9. The student will state the definition of height.

10. The student will state the formula for obtaining the volume of a rectangular prism or a cube:

    Volume = area of base X height

11. The student will estimate the number of beans in a jar by using the formula for obtaining the volume of a space region:

    Volume = area of base X height

12. The student will state several standard units of cubic measure.

13. The student will state several standard units of liquid measure.

14. The student will participate in an activity comparing the volumes of different size bottles in the following way:

    a. the student will gather different size bottles.
    b. the student will select two of the bottles.
    c. the student will fill one of the bottles with water or sand.
    d. the student will pour the contents of that bottle into the empty bottle.
    e. By this comparison of volumes, the student will determine which bottle has the greatest measure.

ED 076630

STUDENT ACHIEVEMENT TEST - PATTERNS

Directions: This is a short test to find out how much you know about some different things in mathematics. It is a test that some people at the University of Georgia have put together to try out in lots of different schools in the state. Your teacher and principal will not see your answers or your score. Only the researchers at the University will see them. We want you to try to do your best.

Read each question and the possible answers very carefully. After you have selected an answer, mark it on the special answer sheet with a soft lead pencil.

For example:

A. A square can be best defined as
(1) a three sided trapezoid
(2) an equal lateral rectangle
(3) a parallelepiped
(4) an equal angular rhombus

A student selected alternative number 2 and marked it this way on his answer sheet.

Answer Sheet

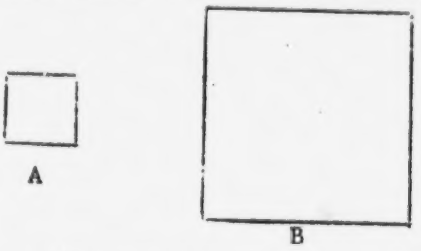
A. 1 = 2 ▬ 3 = 4 = 5 =

If you are not sure of the answer to a question, make your best guess. Be sure to answer every question. Be careful not to use the number 5 answer space on your answer sheet. All questions have only four possible answers. Are there any questions? If not, turn the page and begin.

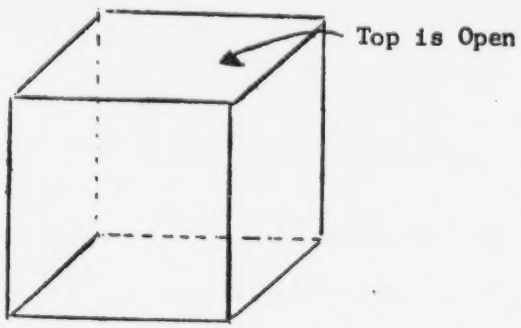
1. One of the four basic principles of measurement listed below is stated incorrectly. Mark the number of the incorrect statement on your answer sheet.
   (1) The unit of measure must be the same unit as the thing being measured.
   (2) Measurement is expressed by numbers.
   (3) Measurements are approximate.
   (4) The larger the unit of measure chosen, the more precise the measurement will be.

2. Approximately how many times will line AB fit on line XY?
   (1) 2
   (2) 3
   (3) 4
   (4) 5

3. Approximately how many times will plane region A fit inside plane region B?
   (1) 6
   (2) 9
   (3) 12
   (4) 15



4. Which plane region below can be folded to form the simple closed surface A?



(1)

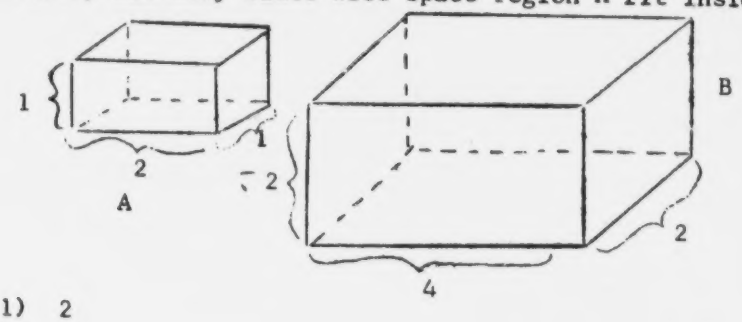
(2)

(3)

(4)

5. Which of the following items is not a space region?
   (1) desktop
   (2) orange
   (3) milk carton
   (4) fruit jar

6. Approximately how many times will space region A fit inside space region B?



   (1) 2
   (2) 4
   (3) 8
   (4) 16

7. The area of the base of a rectangular prism is 6 unit space regions. The height is 5 units. What is the volume of this rectangular prism?
   (1) 11
   (2) 24
   (3) 30
   (4) 55

8. The area of the base of a cube is 4 unit space regions. What is the volume of this cube?
   (1) 20
   (2) 16
   (3) 12
   (4) 8

9. The area of the base of a space region is 3 unit space regions. Its height is 7 units. What is the volume of this space region?
   (1) 10
   (2) 14
   (3) 70
   (4) 21

10. Twenty-three beans are necessary to cover the bottom of a jar. There are thirty-three layers of beans. Approximately how many beans are in the jar?
   (1) 750
   (2) 770
   (3) 760
   (4) cannot be determined from information given

11. Which of the following standard units of measure is <u>not</u> a cubic measure?
   (1) inch
   (2) yard
   (3) pint
   (4) foot

12. Which of the following standard units of measure is <u>not</u> a liquid measure?
    (1) quart
    (2) foot
    (3) gallon
    (4) pint

13. There are two bottles, A and B. Bottle A is filled with water. If the contents of bottle A are poured into bottle B, and bottle B overflows, then the volume of bottle A is ....
    (1) less than the volume of bottle B.
    (2) equal to the volume of bottle B.
    (3) greater than the volume of bottle B.

Questions 14 - 18 are incomplete statements. Select the best statement for completion.

14. A space figure is
    (1) A unit of measure
    (2) A one-dimensional surface
    (3) The measure of a space region
    (4) Any set of points in space
    (5) The union of a space figure and its interior

15. A plane region is
    (1) A unit of measure
    (2) A one-dimensional surface
    (3) The measure of a space region
    (4) Any set of points in space
    (5) The union of a space figure and its interior

16. A space region is
    (1) A unit of measure
    (2) A one-dimensional surface
    (3) The measure of a space region
    (4) Any set of points in space.
    (5) The union of a space figure and its interior

17. A unit space region is
    (1) A unit of measure
    (2) A one-dimensional surface
    (3) The measure of a space region
    (4) Any set of points in space.
    (5) The union of a space figure and its interior

18. A volume is
    (1) A unit of measure
    (2) A one-dimensional surface
    (3) The measure of a space region
    (4) Any set of points in space
    (5) The union of a space figure and its interior

APPENDIX S

EDUCATIONAL TELEVISION QUESTIONNAIRE

University of Georgia — Georgia State Department of Education

For Office Use Only

1-5 1. What is your Zip Code? (This is needed to assist in finding the viewing range for television stations in your area.) _____

6 2. What is the age of the head of the household?
__1. Under 25 __3. 35-49 __5. 65 and over
__2. 25-34 __4. 50-64

7 3. Please indicate the highest level of education reached by the head of the household? (Check the highest level reached.)
__1. Grammar School
__2. Some High School
__3. High School Grad. or Equivalent
__4. Some College
__5. College Graduate
__6. College Grad. plus additional work.

8 4. Which of the following best describes the occupation of the head of the household?
___1. Manual or unskilled labor.
___2. Service industries-barber, hairdresser, waiter, etc.
___3. Protective worker-policeman, fireman, guard, etc.
___4. Skilled worker-plumber, carpenter, machinist, etc.
___5. Foreman or supervisor.
___6. Clerical sales-salesman, sales clerk, secretary, etc.
___7. Owner or manager-office manager, own or manage business, department manager, etc.
___8. Professional -doctor, lawyer, teacher, etc.
___9. Retired.
___0. Other

9 5. How many people live in your household? _____

10-13 6. How many members of your household fall in each of the following age categories?
__1. Under 6 __2. 6-12 __3. 13-16 years __4. 17-20 years

14 7. Do you live in a
__1. house you own?
__2. house you rent?
__3. apartment you own?
__4. apartment you rent?
__5. mobile home you own?
__6. mobile home you rent?

15 8. How many cars are owned by your household? _____

16 9. How many daily newspapers do you receive or purchase?
__1. none __2. one __3. two __4. three __5. four or more

17 10. How many magazines do you receive or purchase regularly each month?
__1. none __2. one __3. two __4. three __5. four or more

18 11. How many black and white television sets do you have in your household? ____

19 12. How many color television sets do you have in your household? ____

20-33 13. How many hours would you estimate the members of your household watch television in the average day? (Please give the total number of hours in each case.)

Children under 6	___hours	Woman of the house	___hours
Children age 6-12	___hours	Man of the house	___hours
Teenagers age 13-16	___hours	Other adults	___hours
Young adults age 17-20	___hours		

34 14. What reason comes closest to your reason for watching television (Please check only one.)
__1. There is some beautiful art and music on television.
__2. It is a way of getting an education; I learn something from television.
__3. It relaxes me.
__4. It gives me an idea of how other people live, it is exciting.
__5. It gives me something to talk about with my friends, it gives me company.
__6. Other.

(Over Please)

For Office Use Only

35 15. How do you go about picking the television program your family or you will watch? (Please check only one.)
__1. We turn the set on to one channel and leave it on that channel.
__2. Turn the dial until we see a program that looks good.
__3. The same program every week, don't make a decision with each program change.
__4. Talk it over with the other members of the household?
__5. Station announcements.
__6. Consult TV Guide.
__7. Consult WGTV Program Guide.
__8. Consult newspaper.
__9. Other.

36 16. Have you ever watched WCES, Channel 20? __1. Yes __2. No (If you answered yes to this question, please skip to question number 18.)

37 17. If you answered no to question 16, which of the following best describes your reason for not watching WCES, Channel 20? (Please check only one.
__1. Poor reception __3. Never heard of WCES, Channel 20?
__2. Don't like the programs. __4. Other.

IF YOU ANSWERED NO TO QUESTION 16 AND HAVE COMPLETED QUESTION 17, PLEASE STOP AND PUT THIS QUESTIONNAIRE IN THE SELF ADDRESSED STAMPED ENVELOPE AND DROP IT IN YOUR NEAREST MAILBOX. THANK YOU FOR YOUR HELP AND COOPERATION IN OUR PROJECT.

38-51 18. If you answered yes to question number 16, how many hours would you estimate the members of your household watch the public television that is on WCES Channel 20 in an average week?

Children under 6	__hours	Woman of the house	__hours
Children age 6-12	__hours	Man of the house	__hours
Teenagers age 13-16	__hours	Other adults	__hours
Young adults age 17-20	__hours		

52-76 19. How often in the last month has any member of your household viewed any of the following television programs. (Please check one response for each program.)

	Not at all	Regularly	Irregularly
52. Georgialand	__1.	__2.	__3.
53. Sesame Street	__1.	__2.	__3.
54. University News	__1.	__2.	3.
55. Bridge with Jean Cox	__1.	__2.	__3.
56. Shavin's Column	__1.	__2.	__3.
57. Sound of Youth	__1.	__2.	__3.
58. The Coach Lawson Show	__1.	__2.	__3.
59. Black Journal	__1.	__2.	__3.
60. NET Playhouse	__1.	__2.	__3.
61. The McCullough Martin Show	__1.	__2.	__3.
62. Firing Line (William Buckley)	__1.	__2.	__3.
63. TV High School	__1.	__2.	__3.
64. NET Journal	__1.	__2.	__3.
65. French Chef (Julia Child)	__1.	__2.	__3.
66. The Forsyth Saga	__1.	__2.	__3.
67. Mr. Rogers	__1.	__2.	__3.
68. The advocates	__1.	__2.	__3.
69. Aunt Lollipop	__1.	__2.	__3.
70. Law Enforcement Training	__1.	__2.	__3.
71. Why You Smoke	__1.	__2.	__3.
72. Men and Ideas (Dr. William Hale)	__1.	__2.	__3.
73. High and Wild	__1.	__2.	__3.
74. The American West	__1.	__2.	__3.
75. Screen Classics	__1.	__2.	__3.
76. Government Story	__1.	__2.	__3.

77 20. How did you first learn about WCES, Channel 20? (Please check only one.)
__1. Finding it on the set. __3. Heard about it from others.
__2. Heard about it on television. __4. Read about it.
__5. Other

78 21. What reason comes closest to your reason for watching WCES, Channel 20?
__1. There is some beautiful art and music on television.
__2. It is a way of getting an education, I learn something from television.
__3. It relaxes me.
__4. It gives me an idea of how other people live, it is exciting.
__5. It gives me something to talk about with my friends.
__6. Other.

79 22. Have you talked to anyone (neighbor, acquaintance, friend) about something you saw on WCES, Channel 20 during the past week? __1. Yes __2. No

THANK YOU FOR TAKING TIME TO COMPLETE THIS QUESTIONNAIRE. PLEASE PUT THIS FORM IN THE SELF ADDRESSED STAMPED ENVELOPE AND DROP IT IN YOUR NEAREST MAILBOX.

APPENDIX T

SAMPLE PUBLIC TELEVISION SURVEY INVITATION LETTER

THE UNIVERSITY OF GEORGIA
COLLEGE OF EDUCATION
ATHENS, GEORGIA 30601

DEPARTMENT OF CURRICULUM
AND SUPERVISION

FOURTH FLOOR BALDWIN HALL
PHONE (404) 542-1343

May 1, 1970

Dear Georgian:

The University of Georgia in cooperation with the Board of Regents and State Department of Education is in the process of studying educational television in our state. As you undoubtedly know, educational television is broadcast over some nine channels located throughout Georgia. As opposed to commercial television (ABC, NBC, and CBS) educational television is concerned almost exclusively with either instructional programs which are beamed into the classrooms of our schools or public broadcasting. General public broadcasting is concerned with news, cultural, and public affairs programs which are seen beginning in the late afternoon on the Georgia Educational Television Network over a special local channel in your area.

We are interested in determining (1) what programs are seen most often on GETV, and (2) what are some characteristics of individuals and households that do or do not watch GETV. Your name has been randomly chosen from the phone book to receive a questionnaire. We respectfully request that you take a few minutes and fill out the attached questionnaire which is focused on public television. Your answers will be kept anonymous, confidential, and used only for statistical purposes. A stamped, self-addressed, return envelope is enclosed for your convenience.

Needless to say your opinions will be valued and contribute to the research project. More informed decisions can then be made about educational television.

Thanking you in advance for your cooperation, I remain

Sincerely,

David A. Payne, Ph.D.
ETV Evaluation Project Director

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